

CBM 94-1

Effect of Corticosteroids for Fetal Maturation on Perinatal Outcomes

January 1985 through December 1993, plus selected earlier citations

715 Citations

Prepared by

Karen Patrias, M.L.S., National Library of Medicine

Linda L. Wright, M.D., National Institute of Child Health and Human Development

Gerald Merenstein, M.D., University of Colorado Health Sciences Center

**U.S. DEPARTMENT OF HEALTH
AND HUMAN SERVICES**
Public Health Service
National Institutes of Health

National Library of Medicine
Reference Section
8600 Rockville Pike
Bethesda, Maryland 20894

1994

National Library of Medicine Cataloging in Publication

SERIES NOTE

Current Bibliographies in Medicine (CBM) is a continuation in part of the National Library of Medicine's Literature Search Series, which ceased in 1987 with No. 87-15. In 1989 it also subsumed the *Specialized Bibliography Series*. Each bibliography in the new series covers a distinct subject area of biomedicine and is intended to fulfill a current awareness function. Citations are usually derived from searching a variety of online databases. NLM databases utilized include MEDLINE®, AVLINE®, BIOETHICSLINE®, CANCERLIT®, CATLINE®, HEALTH, POPLINE™ and TOXLINE®. The only criterion for the inclusion of a particular published work is its relevance to the topic being presented; the format, ownership, or location of the material is not considered.

Comments and suggestions on this series may be addressed to:

Karen Patrias, Editor
Current Bibliographies in Medicine
Reference Section
National Library of Medicine
Bethesda, MD 20894
Phone: 301-496-6097
Fax: 301-402-1384
Internet: patrias@nlm.nih.gov

Ordering Information:

Current Bibliographies in Medicine is sold by the Superintendent of Documents, U.S. Government Printing Office, P.O. 371954, Pittsburgh, PA 15250-7954. To order the entire CBM series for calendar year 1994 (approximately 10 bibliographies), contact the Superintendent of Documents citing GPO List ID: CBM94. For your convenience an order blank is given inside the back cover. Orders for individual bibliographies in the series should also be sent to the Superintendent of Documents citing the title, CBM number, and the GPO List ID given above.

Internet Access:

The *Current Bibliographies in Medicine* series is also available at no cost to anyone with Internet access through FTP (File Transfer Protocol). FTP to nlmpubs.nlm.nih.gov and login: as nlmpubs. The index file in the "bibs" directory provides information on the bibliographies available.

Use of funds for printing this periodical has been approved by the Director of the Office of Management and Budget through September 30, 1994.

EFFECT OF CORTICOSTEROIDS FOR FETAL MATURATION ON PERINATAL OUTCOMES

Preterm delivery is a major cause of infant mortality and morbidity. Approximately 500,000 premature infants are born each year in the United States, many of whom require treatment in newborn intensive care units for complications of their prematurity. The survival and health status of premature infants is directly proportional to their maturity and weight at birth. Preterm infants account for 74 per cent of neonatal deaths; those born before 28 weeks of gestation, instead of the normal 40 weeks, account for 50 per cent of neonatal deaths.

Corticosteroid treatment of pregnant women delivering prematurely was first introduced in 1972 to enhance fetal lung maturity. A recent meta-analysis* concluded that antenatal corticosteroid administration prior to anticipated preterm delivery is associated with substantial reduction in the incidence of early neonatal death, as well as in respiratory distress syndrome, intraventricular hemorrhage, and necrotizing enterocolitis.

Despite evidence of beneficial effects from both experimental models and randomized controlled trials in humans, few women delivered prematurely receive antenatal steroid treatment. In reports from approximately 500 perinatal centers, only 12 to 18 per cent of women who deliver preterm infants 501-1500 grams are treated with antenatal steroids. Many patients are not treated because of concerns about the efficacy of corticosteroid in subpopulations and the potential complications of treatment. There are also questions about the need for corticosteroid therapy since the advent of artificial surfactant therapy.

This bibliography was prepared in support of the National Institutes of Health Consensus Development Conference on the Effect of Corticosteroid for Fetal Maturation on Perinatal Outcomes held February 28-March 2, 1994 in Bethesda, Maryland. Because the literature on antenatal steroids is large, the bibliography is necessarily selective. It emphasizes journal articles in the English language published between 1985 and the present, selected earlier literature, and conference papers published from 1992 through 1993. Preference was given to articles dealing with human subjects, although relevant articles describing prenatal animal models are also included. Selected general articles on outcome of premature infants, surfactant treatment, physiologic hormone levels, and the economics of care were included as background. The bibliography is arranged in five subject categories with subheadings; citations may be listed in more than one category.

*Crowley P, Chalmers I, Keirse MJ. The effects of corticosteroid administration before preterm delivery: an overview of the evidence from controlled trials. *Br J Obstet Gynaecol* 1990 Jan;97(1):11-25.

SEARCH STRATEGY

A variety of online databases are usually searched in preparing bibliographies in the CBM series. To assist you in updating or otherwise manipulating the material in this search, the strategy used for the NLM's MEDLINE database is given below. Please note that the search strategies presented here differ from individual demand searches in that they are generally broadly formulated and irrelevant citations edited out prior to printing.

- SS 1 = ADRENAL CORTEX HORMONES OR EXP GLUCOCORTICOIDS OR
EXP GLUCOCORTICOIDS, SYNTHETIC OR PULMONARY SURFACTANTS
- SS 2 = 1 AND INFANT, NEWBORN OR 1 AND INFANT, PREMATURE OR
1 AND ANIMALS, NEWBORN
- SS 3 = 1 AND EXP A16 OR 1 AND EMBRYOLOGY (SH)
- SS 4 = EXP INFANT, LOW BIRTH WEIGHT OR EXP INFANT, PREMATURE, DISEASES OR
PRENATAL EXPOSURE DELAYED EFFECTS
- SS 5 = EXP FETAL DEVELOPMENT OR EXP FETAL DISEASES OR
EXP FETAL DEATH OR EXP FETAL HEART
- SS 6 = EXP PREGNANCY OR EXP PREGNANCY COMPLICATIONS OR PRENATAL CARE
- SS 7 = 4 OR 5 OR 6
- SS 8 = 1 AND 7 OR 2 OR 3
- SS 9 = (TF) ALL GLUCOCORTICOID: OR ALL CORTICOSTEROID: OR
ALL BETAMETHASONE: OR ALL DEXAMETHASONE: OR
ALL HYDROCORTISONE: OR ADRENAL AND CORTEX AND ALL HORMONE#
- SS10 = (TF) ALL PRETERM: OR ALL ANTENAT: OR ALL PERINAT: OR
ALL PRENAT:
- SS11 = 9 AND 10
- SS12 = 8 AND NOT ALL TRANSPLANT: (MHF)
- SS13 = 11 OR 12

GRATEFUL MED®

To make online searching easier and more efficient, the Library offers GRATEFUL MED, microcomputer-based software that provides a user-friendly interface to most NLM databases. This software was specifically developed for health professionals and features multiple choice menus and "fill in the blank" screens for easy search preparation. GRATEFUL MED runs on an IBM PC (or IBM-compatible) with DOS 2.0 or a Macintosh, and requires a Hayes (or Hayes-compatible) modem. It may be purchased from the National Technical Information Service in Springfield, Virginia, for \$29.95 (plus \$3.00 per order for shipping). For your convenience, an order blank has been enclosed at the back of this bibliography.

SAMPLE CITATIONS

Citations in this bibliographic series are formatted according to the rules established for *Index Medicus*^{®*}. Sample journal and monograph citations appear below. For journal articles written in a foreign language, the English translation of the title is placed in brackets; for monographs, the title is given in the original language. In both cases the language of publication is shown by a three letter abbreviation appearing at the end of the citation.

Journal Article:

Authors *Article Title*

Anlar Y, Annar B. The effect of dexamethasone on neutrophil adherence in umbilical cord blood.
Early Hum Dev 1987 Sep;15(5):265-8.

Abbreviated Journal Title *Date* *Volume* *Issue* *Pages*

Monograph Chapter:

Author of Chapter *Title of Chapter* *Editor(s) of Book*

Crowley P. Promoting pulmonary maturity. Chalmers I, Enkin M, Keirse MJ, editors.
Effective care in pregnancy and childbirth. New York: Oxford Univ. Press; 1989. p.746-4

Title of Book *Place of Publication* *Publisher* *Date* *Pages*

*For details of the formats used for references, see the following publication:

Patrias, Karen. *National Library of Medicine recommended formats for bibliographic citation*.
Bethesda (MD): The Library; 1991 Apr. Available from: NTIS, Springfield, VA; PB91-182030.

TABLE OF CONTENTS

	<i>page</i>
NEWBORN	
Cardiovascular Effects	1
Central Nervous System Effects	2
Endocrine Effects	4
Gastrointestinal Effects (incl. Bilirubin)	7
Immunology and Infection	7
Outcome	8
Pharmacology	13
Pulmonary Effects	17
Renal Function	27
MATERNAL	
Adverse Effects	28
Combination Therapy	29
High-Risk Pregnancies	32
Pharmacology	35
ECONOMICS	38
META-ANALYSIS	39
ANIMAL MODELS	
Behavior	40
Cardiovascular Effects	40
Central Nervous System Effects	41
Combination Therapy	43
Endocrine Effects	44
Gastrointestinal Effects	45
Pharmacology	46
Pulmonary Effects	48
Renal Function	53

NEWBORN

Wasserstrum N, Huhta JC, Mari G, Sharif DS, Willis R, Neal NK. Betamethasone and the human fetal ductus arteriosus. *Obstet Gynecol* 1989 Dec;74(6):897-900.

Cardiovascular Effects

Arduini D, Rizzo G, Parlati E, Giorlandino C, Valensise H, Dell'Acqua S, Romanini C. Modifications of ultradian and circadian rhythms of fetal heart rate after fetal-maternal adrenal gland suppression: a double blind study. *Prenat Diagn* 1986 Nov-Dec;6(6):409-17.

Clyman RI, Ballard PL, Sniderman S, et al. Prenatal administration of betamethasone for prevention of patent ductus arteriosus. *J Pediatr* 1981 Jan;98(1):123-6.

Clyman RI, Mauray F, Roman C, Rudolph AM, Heymann MA. Glucocorticoids alter the sensitivity of the lamb ductus arteriosus to prostaglandin E2. *J Pediatr* 1981 Jan;98(1):126-8.

Edwards CR, Benediktsson R, Lindsay RS, Seckl JR. Dysfunction of placental glucocorticoid barrier: link between fetal environment and adult hypertension? *Lancet* 1993 Feb 6;341(8841):355-7. Comment in: *Lancet* 1993 Mar 27;341(8848):827; *Lancet* 1993 Mar 27;341(8848):827-8.

Eronen M, Kari A, Pesonen E, Hallman M. The effect of antenatal dexamethasone administration on the fetal and neonatal ductus arteriosus. A randomized double-blind study. *Am J Dis Child* 1993 Feb;147(2):187-92.

Fausser A, Pohlandt F, Bartmann P, Gortner L. Rapid increase of blood pressure in extremely low birth weight infants after a single dose of dexamethasone. *Eur J Pediatr* 1993 Apr;152(4):354-6.

Heyman E, Ohlsson A, Shennan AT, Heilbut M, Coceani F. Closure of patent ductus arteriosus after treatment with dexamethasone. *Acta Paediatr Scand* 1990 Jun-Jul;79(6-7):698-700.

Leung A, Neale E, Rogers M. Transient improvement of umbilical arterial waveform after maternal steroid administration. Case report. *Br J Obstet Gynaecol* 1991 May;98(5):492-3.

Ohlsson A, Heyman E. Dexamethasone-induced bradycardia [letter]. *Lancet* 1988 Nov 5;2(8619):1074.

Quiel V. [Conservative treatment of HELLP syndrome]. *Zentralbl Gynakol* 1993;115(8):378-80. (Ger).

Sabin S, Diss E, Porreco RP. Betamethasone TRH treatment of preterm fetuses alters the appearance of fetal heart rate tracings [abstract]. *Am J Obstet Gynecol* 1993;168(1 Pt 2):337.

Central Nervous System Effects

- Amato M, Huppi P, Markus D, Herschkowitz N. Neurological function of immature babies after surfactant replacement therapy. *Neuropediatrics* 1991 Feb;22(1):43-4.
- Clark CE, Clyman RI, Roth RS, et al. Risk factor analysis of intraventricular hemorrhage in low birthweight infants. *J Pediatr* 1981 Oct;99(4):625-8.
- Cordella L. [Stress, glucocorticoids, and handicap: Prenatal and perinatal data]. *Ital J Intellective Impair* 1989 Jun;2(1):75-83. (Ita).
- de Zegher F, de Vries L, Pierrat V, Daniels H, Spitz B, Casar P, Devlieger H, Eggermont E. Effect of prenatal betamethasone/thyrotropin releasing hormone treatment on somatosensory evoked potentials in preterm newborns. *Pediatr Res* 1992 Aug;32(2):212-4.
- Doyle LW, Kitchen WH, Ford GW, Rickards AL, Lissenden JV, Ryan MM. Effects of antenatal steroid therapy on mortality and morbidity in very low birth weight infants. *J Pediatr* 1986 Feb;108(2):287-92.
- Fazzi E, Bianchini L, Ometto A, Piazza F, Rondini G, Lanzi G. [Infantile cerebral palsy and neuromotor development in very low birth weight infants]. *Minerva Pediatr* 1990 Jun;42(6):219-25. (Ita).
- Fazzi E, Orcesi S, Spinillo A, Stronati M, Telesca C, Farinotti L. [Neuropsychologic development of small for gestational age preterm infants: follow up at 12-36 months of age]. *Pediatr Med Chir* 1992 Jul-Aug;14(4):403-7. (Ita).
- Fernandez-Carrocer LA, Patino-Felix F, Udaeta-Mora E, Garza Morales S, Ibarra-Reyes MP, Rodriguez-Perez L. [Subependymal/ intraventricular hemorrhage in preterm newborn infants. Neurodevelopmental course during the first year of life]. *Bol Med Hosp Infant Mex* 1993 Apr;50(4):241-7. (Spa).
- Forslund M, Bjerre I. Follow-up of preterm children. I. Neurological assessment at 4 years of age. *Early Hum Dev* 1989 Sep;20(1):45-66.
- Garite TJ, Freeman RK, Linzey EM, et al. Prospective randomized study of corticosteroids in the management of premature rupture of the membranes and the premature gestation. *Am J Obstet Gynecol* 1981;141:508-15.
- Copper RL. Neonatal periventricular- intraventricular hemorrhage after maternal beta-sympathomimetic tocolysis. The March of Dimes Multicenter Study Group. *Am J Obstet Gynecol* 1992 Oct;167(4 Pt 1):873-9.
- Hack M, Horbar JD, Malloy MH, Tyson JE, Wright E, Wright L. Very low birth weight outcomes of the National Institute of Child Health and Human Development Neonatal Network. *Pediatrics* 1991 May;87(5):587-97. Comment in: *Pediatrics* 1992 Feb;89(2):357; discussion 357-8.
- Halsey CL, Collin MF, Anderson CL. Extremely low birth weight children and their peers: a comparison of preschool performance. *Pediatrics* 1993 Apr;91(4):807-11.
- Jarvenpaa AL, Vlrntanen M, Pohjavuori M. The outcome of extremely low birthweight infants. *Ann Med* 1991 Dec;23(6):699-704.
- Katz M, Meizner I, Holcberg G, Mazor M, Hagay ZJ, Insler V. Reduction or cessation of fetal movements after administration of steroids for enhancement of lung maturation. I. Clinical evaluation. *Isr J Med Sci* 1988 Jan;24(1):5-9.
- Kitchen WH, Doyle LW, Rickards AL, Ford G, Kelly E, Callanan C. Survivors of extreme prematurity--outcome at 8 years of age. *Aust N Z J Obstet Gynaecol* 1991 Nov;31(4):337-9.
- Kitchen WH, Rickards AL, Doyle LW, Ford GW, Kelly EA, Callanan C. Improvement in outcome for very low birthweight children: apparent or real? *Med J Aust* 1992 Aug 3;157(3):154-8.
- Klein NK, Hack M, Breslau N. Children who were very low birth weight: development and academic achievement at nine years of age. *J Dev Behav Pediatr* 1989 Feb;10(1):32-7.
- Lee H, Barratt MS. Cognitive development of preterm low birth weight children at 5 to 8 years old. *J Dev Behav Pediatr* 1993 Aug;14(4):242-9.
- Leviton A, Kuban KC, Pagano M, Allred EN, Van Marter L. Antenatal corticosteroids appear to reduce the risk of postnatal germinal matrix hemorrhage in intubated low birth weight newborns. *Pediatrics* 1993 Jun;91(6):1083-8.
- Lipper EG, Ross GS, Auld PA, Glassman MB. Survival and outcome of infants weighing less than 800 grams at birth. *Am J Obstet Gynecol* 1990 Jul;163(1 Pt 1):146-50. Comment in: *Am J Obstet Gynecol* 1991 Aug;165(2):482-3; *Am J Obstet Gynecol* 1991 Oct;165(4 Pt 1):1159-60.
- MacArthur B, Howie RN, DeZoete A, Elkins J, Liang AY. Long-term follow-up of children exposed to betamethasone in utero. In: Tejani N, editor. *Obstetrical events and developmental sequelae*. Boca Raton (FL): CRC Press; 1990. p. 81-9.
- MacArthur BA, Howie RN, Dezoete JA, Elkins J. Cognitive and psychosocial development of 4-year-old children whose mothers were treated antenatally with betamethasone. *Pediatrics* 1981 Nov;68(5):638-43.

- MacArthur BA, Howie RN, Dezoete JA, Elkins J. School progress and cognitive development of 6-year-old children whose mothers were treated antenatally with betamethasone. *Pediatrics* 1982 Jul;70(1):99-105.
- Maher J, Goldenberg RL. Outcomes of very-low-birth-weight infants after maternal corticosteroid therapy before 28 weeks' gestation [letter]. *Am J Obstet Gynecol* 1993 Nov;169(5):1363-4.
- Marlow N, Roberts L, Cooke R. Outcome at 8 years for children with birth weights of 1250 g or less. *Arch Dis Child* 1993 Mar;68(3 Spec No):286-90.
- McCormick MC. Has the prevalence of handicapped infants increased with improved survival of the very low birth weight infant? *Clin Perinatol* 1993 Mar; 20(1):263-77.
- McCormick MC, Brooks-Gunn J, Workman-Daniels K, Turner J, Peckham GJ. The health and developmental status of very low-birth-weight children at school age. *JAMA* 1992 Apr 22-29; 267(16):2204-8.
- Meizner I, Katz M, Holcberg G, Insler V. Reduction or cessation of fetal movements after steroid administration for enhancement of lung maturation. II: Analysis of blood flow velocimetry. *Isr J Med Sci* 1989 Oct;25(10):556-9.
- Msall ME, Buck GM, Rogers BT, Merke D, Catanzaro NL, Zorn WA. Risk factors for major neurodevelopmental impairments and need for special education resources in extremely premature infants. *J Pediatr* 1991 Oct;119(4):606-14. Published erratum appears in *J Pediatr* 1992 May;120(5):838.
- Pryds O, Trojaborg W, Carlsen J, Jensen J. Determinants of visual evoked potentials in preterm infants. *Early Hum Dev* 1989;19(2):117-26.
- Ross G, Lipper EG, Auld PA. Educational status and school-related abilities of very low birth weight premature children. *Pediatrics* 1991 Dec;88(6): 1125-34.
- Saigal S, Szatmari P, Rosenbaum P, Campbell D, King S. Cognitive abilities and school performance of extremely low birth weight children and matched term control children at age 8 years: a regional study. *J Pediatr* 1991 May;118(5):751-60.
- Schmand B, Neuvel J, Smolders-de Haas H, Hoeks J, Treffers PE, Koppe JG. Psychological development of children who were treated antenatally with corticosteroids to prevent respiratory distress syndrome. *Pediatrics* 1990 Jul;86(1):58-64.
- Veen S, Ens-Dokkum MH, Schreuder AM, Verloove-Vanhorick SP, Brand R, Ruys JH. Impairments, disabilities, and handicaps of very preterm and very-low-birthweight infants at five years of age. The Collaborative Project on Preterm and Small for Gestational Age Infants (POPS) in The Netherlands. *Lancet* 1991 Jul 6;338(8758): 33-6. Comment in: *Lancet* 1991 Aug 24; 338(8765):511-2.
- White AD, Andrews ED, Weinberg JM, Wold DE, Long WA. The Exosurf Neonatal TIND Study Group. Factors associated with intraventricular hemorrhage (IVH) in the exosurf neonatal treatment IND (TIND) [abstract]. *Pediatr Res* 1992;31: 263A.

Endocrine Effects

- Ametov AS, Chechkova OB, Samsygina GA, Chernukha VA, Kazakova LE. [Hypophyseal, thyroid and adrenal cortical hormone levels in the blood serum of newborn infants in the early neonatal period]. *Pediatrics* 1985 Sep;(9):20-2. (Rus).
- Arduini D, Rizzo G, Parlati E, Giorlandino C, Valensise H, Dell'Acqua S, Romanini C. Modifications of ultradian and circadian rhythms of fetal heart rate after fetal-maternal adrenal gland suppression: a double blind study. *Prenat Diagn* 1986 Nov-Dec;6(6):409-17.
- Bacigalupo G, Langner K, Schmidt S, Saling E. Plasma immunoreactive beta-endorphin, ACTH and cortisol concentrations in mothers and their neonates immediately after delivery--their relationship to the duration of labor. *J Perinat Med* 1987;15(1):45-52.
- Bagnoli F, Bruchi S, Garosi G, Caniggia I, Inaudi PA. [Phenomenon of neonatal adaptation: progesterone, ACTH and cortisol during the 1st 24 hours of life]. *Boll Soc Ital Biol Sper* 1988 Apr;64(4):317-22. (Ita).
- Ballard PL, Ballard RA, Creasy RK, Padbury J, Polk DH, Bracken M, Moya FR, Gross I. Plasma thyroid hormones and prolactin in premature infants and their mothers after prenatal treatment with thyrotropin-releasing hormone. *Pediatr Res* 1992 Dec;32(6):673-8.
- Branchaud CL, Goodyer CG, Shore P, Lipowski LS, Lefebvre Y. Functional zonation of the midgestation human fetal adrenal cortex: fetal versus definitive zone use of progesterone for cortisol synthesis. *Am J Obstet Gynecol* 1985 Jan 15;151(2):271-7.
- Broide E, Bistrizter T, Livne M, Neuman M, Goldberg M, Aladjem M. The effect of prenatal administration of dexamethasone and ritodrine on cord blood cortisol and glucose concentrations in premature infants with respiratory distress syndrome. *J Perinat Med* 1992;20(4):289-95.
- Chan EC, Smith R, Lewin T, Brinsmead MW, Zhang HP, Cubis J, Thornton K, Hurt D. Plasma corticotropin-releasing hormone, beta-endorphin and cortisol inter-relationships during human pregnancy. *Acta Endocrinol (Copenh)* 1993 Apr;128(4):339-44.
- Charnvise S, Fencel MD, Osathanondh R, Zhu MG, Underwood R, Tulchinsky D. Adrenal steroids in maternal and cord blood after dexamethasone administration at midterm. *J Clin Endocrinol Metab* 1985 Dec;61(6):1220-2.
- Chernukha EA, Komissarova LM, Malysheva VA, Abubakirova AM, Galstian AA. [Cortisol contents in maternal and umbilical artery blood during delivery of low birth weight fetuses]. *Akush Ginekol (Mosk)* 1989 Jan;(1):26-30. (Rus).
- de Graeff-Meeder ER, Wit JM. [Glucocorticoids in pregnancy: effects on the fetus and newborn infant]. *Ned Tijdschr Geneesk* 1986 Nov 29;130(48):2168-71. (Dut).
- Dorr HG, Sippell WG, Versmold HT, Bidlingmaier F, Knorr D. Plasma mineralocorticoids, glucocorticoids, and progestins in premature infants: longitudinal study during the first week of life. *Pediatr Res* 1988 May;23(5):525-9.
- Endoh A. Trend analysis of serum progesterone, deoxycorticosterone, deoxycorticosterone sulfate, cortisol, corticosterone, 18-hydroxydeoxycorticosterone and estradiol in early neonates. *Endocrinol Jpn* 1989 Dec;36(6):851-8.
- Farquharson RG, Dyas J, Pierrepont CG. Cortisol concentrations in the umbilical artery and vein of breech-presenting infants at term in relation to the method of delivery. *Br J Obstet Gynaecol* 1985 Oct;92(10):1040-3.
- Ferrari S, Zacchse G, Zanini F, Rosignoli R, Corgnati A, Rossi L, Gaioni L. [Controlled study on the prevention of respiratory distress syndrome with betamethasone in pregnancy and ACTH and cortisol levels in the premature newborn infant]. *Pediatr Med Chir* 1985 Mar-Apr;7(2):279-82. (Ita).
- Franklin RC, Purdie GL, O'Grady CM. Neonatal thyroid function: prematurity, prenatal steroids, and respiratory distress syndrome. *Arch Dis Child* 1986 Jun;61(6):589-92.
- Fustinana C, Cernandas JC, Lopez N, Rodriguez D. Somatic growth in VLBW infants prenatally treated with betamethasone plus TRH [abstract]. *Pediatr Res* 1993;33(4 Pt 2):260a.
- Goland RS, Conwell IM, Warren WB, Wardlaw SL. Placental corticotropin-releasing hormone and pituitary-adrenal function during pregnancy. *Neuroendocrinology* 1992;56(5):742-9.
- Goland RS, Wardlaw SL, Blum M, Tropper PJ, Stark RI. Biologically active corticotropin-releasing hormone in maternal and fetal plasma during pregnancy. *Am J Obstet Gynecol* 1988;159(4):884-90.
- Hanes RC Jr. Adrenocorticotrophic hormone: adrenocortical steroids and their synthetic analogs; inhibitors of the synthesis and actions of adrenocortical hormones. In: Gilman AG, et al., editors. *Goodman and Gilman's the pharmacological basis of therapeutics*. 8th ed. New York: Pergamon Press; 1990. p. 1431-59.
- Haning RV Jr, Curet LB, Poole WK, Boehnlein LM, Kuzma DL, Meier SM. Effects of fetal sex and dexamethasone on preterm maternal serum concentrations of human chorionic gonadotropin,

- progesterone, estrone, estradiol, and estriol. *Am J Obstet Gynecol* 1989 Dec;161(6 Pt 1):1549-53.
- Hanna CE, Keith LD, Colasurdo MA, Buffkin DC, Laird MR, Mandel SH, Cook DM, LaFranchi SH, Reynolds JW. Hypothalamic-pituitary-adrenal function in the extremely low birth weight infant. *J Clin Endocrinol Metab* 1993 Feb;76(2):384-7.
- Hercz P. Quantitative changes in steroid and peptide hormones in the maternal-fetoplacental system between the 28th-40th weeks of pregnancy. *Acta Med Hung* 1985;42(1-2):29-39.
- Hercz P, Siklos P, Ungar L. Serum cortisol level changes in the maternal-fetoplacental unit between the 28th-40th weeks of pregnancy. *Acta Physiol Hung* 1987;69(2):161-5.
- Hercz P, Siklos P, Ungar L. Serum dehydroepiandrosterone and cortisol concentration in the maternal-fetoplacental hormonal system in elective caesarean section and spontaneous vaginal delivery in the 28th to 36th and 40th weeks of pregnancy. *Gynecol Obstet Invest* 1990;29(2):112-4.
- Homoki J, Limmer G, Teller WM. Influence of maternal antenatal treatment with betamethasone on the postnatal adrenal status in preterm infants. In: Gorog S, editor. *Advances in steroid analysis '90. 4th Symposium of the Analysis on Steroids; 1990 Apr 24-26; Pecs, Hungary.* Budapest: Akademiai Kiado; 1991. p. 333-8.
- Honour JH, Wickramaratne K, Valman HB. Adrenal function in preterm infants. *Biol Neonate* 1992; 61(4):214-21.
- Ipsiroglu OS, Semmelrock J, Gmoser G, Stockler S, Rosegger H. [The value of umbilical cord blood cortisol]. *Gynakol Rundsch* 1990;30 Suppl 1: 197-8. (Ger).
- Jaskiewicz J, Szafran Z, Szafran H, Sztefko K, Sucharski P. The relation between growth hormone, cortisol and insulin and plasma levels of free fatty acids and glucose in healthy mothers at delivery and their newborn children. *Endokrynol Pol* 1985;36(4):205-13.
- Jones SA, Brooks AN, Challis JR. Steroids modulate corticotropin-releasing hormone production in human fetal membranes and placenta. *J Clin Endocrinol Metab* 1989 Apr;68(4):825-30.
- Kairalla AB. Hypothalamic-pituitary-adrenal axis function in premature neonates after extensive prenatal treatment with betamethasone: a case history. *Am J Perinatol* 1992 Sep-Nov;9(5-6): 428-30.
- Kraiem Z, Sack J, Brish M. Serum cortisol levels: the first 10 days in full-term and preterm infants. *Isr J Med Sci* 1985 Feb;21(2):170-2.
- Kubota T, Tsuzuki H, Saito M. Determination of prolactin, growth hormone, beta-endorphin, and cortisol in both maternal plasma and amniotic fluid during human gestation. *Acta Endocrinol (Copenh)* 1989 Aug;121(2):297-303.
- Kuznetsova LV. [Adrenal glucocorticoid function and its regulation in human prenatal ontogeny and in the 1st week of life]. *Biull Eksp Biol Med* 1987 Jul; 104(7):11-3. (Rus).
- Lao TT, Panesar NS. The effect of labour on prolactin and cortisol concentrations in the mother and the fetus. *Eur J Obstet Gynecol Reprod Biol* 1989 Mar;30(3):233-8.
- Lauterbach R, Szafran H, Szafran Z. Blood glucose concentration and the levels of cortisol, growth hormone and insulin in women at labour and their healthy neonates born by vaginal delivery and cesarean section. *Endokrynol Pol* 1988;39(4): 169-79.
- Lopez Bernal A, MacKenzie IZ. Corticosteroid levels in human fetal blood at midgestation and at term. *Am J Obstet Gynecol* 1987 Jan;156(1):112-3.
- Lopez Bernal A, Turnbull AC. Cortisol metabolism in human placenta and decidua is resistant to anoxia. *Horm Metab Res* 1985 Mar;17(3):167.
- Mendelson CR, Snyder JM. Role of prolactin, cortisol, and insulin in the regulation of surfactant synthesis by the human fetal lung. *Pediatr Pulmonol* 1985 May-Jun;1(3 Suppl):S91-8.
- Murphy BE, Clark SJ, Donald IR, Pinsky M, Vedady D. Conversion of maternal cortisol to cortisone during placental transfer to the human fetus. *Am J Obstet Gynecol* 1974 Feb 15;118(4):538-41.
- Nahoul K, Daffos F, Forestier F, Chartier M, Scholler R. Plasma corticosteroid patterns in the fetus. *J Steroid Biochem* 1988 Jun;29(6):635-40.
- Nahoul K, Daffos F, Forestier F, Dehennin L. Corticosteroid sulfates in fetus plasma. *J Steroid Biochem* 1989 Oct;33(4A):613-9.
- Nahoul K, Daffos F, Forestier F, Scholler R. Cortisol, cortisone and dehydroepiandrosterone sulfate levels in umbilical cord and maternal plasma between 21 and 30 weeks of pregnancy. *J Steroid Biochem* 1985 Oct;23(4):445-50.
- Neri A, Merlob P, Kaplan B, Ovadia Y, Kaufman H. Maternal and cord plasma cortisol and aldosterone levels at delivery, in various ethnic groups in Israel. Preliminary report. *Isr J Med Sci* 1986 Jul-Aug; 22(7-8):576-8.
- Okamoto E, Takagi T, Makino T, Sata H, Iwata I, Nishino E, Mitsuda N, Sugita N, Otsuki Y, Tanizawa O. Immunoreactive corticotropin-releasing hormone, adrenocorticotropin and cortisol

- in human plasma during pregnancy and delivery and postpartum. *Horm Metab Res* 1989 Oct;21(10):566-72.
- Partsch CJ, Sippell WG, MacKenzie IZ, Aynsley-Green A. The steroid hormonal milieu of the undisturbed human fetus and mother at 16-20 weeks gestation. *J Clin Endocrinol Metab* 1991;73(5):969-74.
- Pohjavuori M, Rovamo L, Laatikainen T. Plasma immunoreactive beta-endorphin and cortisol in the newborn infant after elective caesarean section and after spontaneous labour. *Eur J Obstet Gynecol Reprod Biol* 1985 Feb;19(2):67-74.
- Procianoy RS, Cecin SKG. The influence of labor and delivery on preterm fetal adrenal function. *Acta Paediatr Scand* 1985;74(3):400-4.
- Procianoy RS, Cecin SK. Umbilical cord dehydroepiandrosterone sulfate and cortisol levels in preterm infants born to pre-eclamptic mothers. *Acta Paediatr Scand* 1986 Mar;75(2):279-82.
- Rennie JM, Baker B, Lucas A. Does dexamethasone suppress the ACTH response in preterm babies? *Arch Dis Child* 1989 Apr;64(4):612-3. Comment in: *Arch Dis Child* 1989 Oct;64(10):1514-5.
- Reynolds GJ, Yu VY, Doery J. Does dexamethasone suppress the ACTH response in preterm babies? [letter]. *Arch Dis Child* 1989 Oct;64(10):1514-5. Comment on: *Arch Dis Child* 1989 Apr;64(4):612-3.
- Robinson BG, Emanuel RL, Frim DM, Majzoub JA. Glucocorticoid stimulates expression of corticotropin-releasing hormone gene in human placenta. *Proc Natl Acad Sci U S A* 1988 Jul;85(14):5244-8.
- Ruth V, Hallman M, Laatikainen T. Corticotropin-releasing hormone and cortisol in cord plasma in relation to gestational age, labor, and fetal distress. *Am J Perinatol* 1993 Mar;10(2):115-8.
- Saito K, Nishijima M, Horiuchi S. [Changes in glucocorticoid receptor in human placentas: correlation with cortisol levels in maternal and umbilical cord plasma]. *J Iwatw Med Assoc* 1990;42(6):837-46. (Jpn).
- Siamopoulou-Mavridou A, Mavridis AK, Vizandiadis A, Harsoulis P. Free urinary cortisol immunoreactive levels in premature and full term infants. *Acta Paediatr Scand* 1986 Nov;75(6):919-22.
- Suzuki A, Hashino M, Chiba H, Saito H, Notake Y, Yanaihara T, Nakayama T. [Correlation between the levels of catecholamines (noradrenaline, adrenaline) and adrenal steroids (DHA-S, cortisol) in maternal and fetal blood during pregnancy and labor]. *Nippon Naibunpi Gakkai Zasshi* 1989 Aug 20;65(8):704-14. (Jpn).
- Teramo K, Hallman M, Raivio KO. Maternal glucocorticoid in unplanned premature labor. Controlled study on the effects of betamethasone phosphate on the phospholipids of the gastric aspirate and on the adrenal cortical function of the newborn infant. *Pediatr Res* 1980 Apr;14(4 Pt 1):326-9.
- Tropper PJ, Warren WB, Jozak SM, Conwell IM, Stark RL, Goland RS. Corticotropin releasing hormone concentrations in umbilical cord blood of preterm fetuses. *J Dev Physiol* 1992 Aug;18(2):81-5.
- Wittekind CA, Arnold JD, Leslie GI, Luttrell B, Jones MP. Longitudinal study of plasma acth and cortisol in very low birth weight infants in the first 8 weeks of life. *Early Hum Dev* 1993;33(3):191-200.

Gastrointestinal Effects (including Bilirubin)

- Arsenault P, Menard D. Influence of hydrocortisone on human fetal small intestine in organ culture. *J Pediatr Gastroenterol Nutr* 1985 Dec;4(6): 893-901.
- Bauer CR, Morrison JC, Poole WK, Korones SB, Boehm JJ, Rigatto H, Zachman RD. Decreased incidence of necrotizing enterocolitis after prenatal glucocorticoid therapy. *Pediatrics* 1984 May;73(5): 682-8.
- Halac E, Halac J, Begue EF, Casanas JM, Indiveri DR, Petit JF, Figueroa MJ, Olmas JM, Rodriguez LA, Obregon RJ, et al. Prenatal and postnatal corticosteroid therapy to prevent neonatal necrotizing enterocolitis: a controlled trial. *J Pediatr* 1990 Jul;117(1 Pt 1):132-8.
- Morriss FH Jr, Moore M, Weisbrodt NW, West MS. Ontogenic development of gastrointestinal motility IV. Duodenal contractions in preterm infants. *Pediatrics* 1986;78(6):1106-13.
- Rokicki W, Krasnodebski J. Antenatal glucocorticoid administration and neonatal glycemia. *Dev Pharmacol Ther* 1987;10(4):307-11.
- Villa M, Menard D, Semenza G, Mantei N. The expression of lactase enzymatic activity and mRNA in human fetal jejunum: effect of organ culture and of treatment with hydrocortisone. *FEBS Lett* 1992; 301(2):202-6.

Immunology and Infection

- Anlar Y, Anlar B. The effect of dexamethasone on neutrophil adherence in umbilical cord blood. *Early Hum Dev* 1987 Sep;15(5):265-8.
- Barak M, Cohen A, Herschkowitz S. Total leukocyte and neutrophil count changes associated with antenatal betamethasone administration in premature infants. *Acta Paediatr* 1992 Oct;81(10):760-3.
- Frtizsching K, Strobauch P. [Neonatal leukocytosis caused by corticoid administration]. *Kinderarztl Prax* 1985 Sep;53(9):449-51. (Ger).
- Fuenfer MM, Herson VC, Raye JR, Woronick CL, Eisenfeld L, Ingardia CJ, Block CF, Krause PJ. The effect of betamethasone on neonatal neutrophil chemotaxis. *Pediatr Res* 1987 Aug;22(2):150-3.
- Khairullin RM, Khlystova ZS, Kuznetsova LV. [Kinetics of T-lymphocytes and cortisol in the blood of the human fetus]. *Akush Ginekol (Mosk)* 1987 Jan;(1):60-1. (Rus).
- Lazzarin A, Luerti M, Capsoni F, Galli M, Uberti-Foppa C, Zavattini G, Corbella E. A study of cellular immunity in newborns after prevention of respiratory distress syndrome (RDS). *Int J Tissue React* 1986;8(2):157-65.
- Martell M, Oehninger C, Scotti C, Delgado L, Martinez M, Korc I. Influence of glucocorticoid and betamimetic therapy on milk secretory IgA concentration produced by mothers delivering preterm infants. *J Perinat Med* 1985;13(2):61-5.
- Schmidt PL, Sims ME, Strassner HT, Paul RH, Mueller E, McCart D. Effect of antepartum glucocorticoid administration upon neonatal respiratory distress syndrome and perinatal infection. *Am J Obstet Gynecol* 1984 Jan 15; 148(2):178-86.
- Tausch HW Jr. Glucocorticoid prophylaxis for respiratory distress syndrome: a review of potential toxicity. *J Pediatr* 1975;87:617-23.
- Tausch HW Jr, Frigoletto F, Kitzmiller J, Avery ME, Hehre A, Fromm B, Lawson E, Neff RK. Risk of respiratory distress syndrome after prenatal dexamethasone treatment. *Pediatrics* 1979 Jan; 63(1):64-72.
- Zachman RD, Bauer CR, Boehm J, Korones SB, Rigatto H, Rao AV. Effect of antenatal dexamethasone on neonatal leukocyte count. *J Perinatol* 1988 Spring;8(2):111-3.
- Zykh I, Dorachinski G, Zykh M. [Effect of preventive use of dexamethasone on various indicators of humoral immunity in mothers and newborn infants]. *Akush Ginekol (Mosk)* 1990 Jun;(6):54-5. (Rus).

Outcome

- Agfalvi R, Darvay S, Bodankzky H, Gacs G. A longitudinal study of the growth of infants with low birth weight: growth and development of infants appropriate for gestational age and of infants small for gestational age. *Arztl Jugendkd* 1990;81(5):344-7.
- Andrews EB, White AD, Weinberg JM, Layne R, Long WA. Antenatal steroids and neonatal outcomes in infants receiving surfactants in the Exosurf treatment IND [abstract]. *Pediatr Res* 1992;31: 241A.
- Atkinson AM, Gaudier F, Cliver SP, et al. The interaction of the maternal corticosteroids and tocolytic treatment on morbidity and mortality rates in very low birth weight infants [abstract]. *Am J Obstet Gynecol* 1994;170:386.
- Avery ME. The argument for prenatal administration of dexamethasone to prevent respiratory distress syndrome [editorial]. *J Pediatr* 1984 Feb;104(2):240.
- Aylward GP, Pfeiffer SI, Wright A, Verhulst SJ. Outcome studies of low birth weight infants published in the last decade: a metaanalysis. *J Pediatr* 1989 Oct;115(4):515-20. Comment in: *J Pediatr* 1990 Jul; 117(1 Pt 1):167-8; *J Pediatr* 1990 Sep;117(3):511-2.
- Benesova O, Pavlik A. Behavioural teratogenic risk of perinatal glucocorticoid treatment. 21st Interdisciplinary Conference on Experimental and Clinical Study of Higher Nervous Functions (1985, Olomouc, Czechoslovakia). *Acta Nerv Super* 1986 Sep;28(3):197-8.
- Blackman JA. Neonatal intensive care: is it worth it? Developmental sequelae of very low birthweight. *Pediatr Clin North Am* 1991 Dec;38(6):1497-511.
- Block MF, Kling OR, Crosby WM. Antenatal glucocorticoid therapy for the prevention of respiratory distress syndrome in the premature infant. *Obstet Gynecol* 1977 Aug;50(2):186-90.
- Boyle MH, Torrance GW, Sinclair JC, Horwood SP. Economic evaluation of neonatal intensive care of very-low-birth-weight infants. *N Engl J Med* 1983 Jun 2;308(22):1330-7.
- Bregman J, Kimberlin LV. Developmental outcome in extremely premature infants. Impact of surfactant. *Pediatr Clin North Am* 1993 Oct;40(5):937-53.
- Caspi E, Schreyer P, Weinraub Z, Reif R, Levi I, Mundel G. Prevention of the respiratory distress syndrome in premature infants by antepartum glucocorticoid therapy. *Br J Obstet Gynaecol* 1976 Mar;83(3):187-93.
- Coccia C, Pezzani M, Moro GE, Minoli I. Management of extremely low-birth-weight infants. *Acta Paediatr* 1992 Oct;81 Suppl 382:10-2.
- Cohen I, Altaras M, Jaffe R, Aderet NB. Perinatal factors influencing outcome of very-low-birth weight infants. *Isr J Med Sci* 1986;22(6):430-4.
- Cooke RW. Annual audit of neonatal morbidity in preterm infants. *Arch Dis Child* 1992 Oct;67(10 Spec No):1174-6.
- Cooke RW. Annual audit of three year outcome in very low birthweight infants. *Arch Dis Child* 1993 Sep;69(3 Spec No):295-8.
- Cordella L. [Stress, glucocorticoids, and handicap: Prenatal and perinatal data]. *Ital J Intellective Impair* 1989 Jun;2(1):75-83. (Ita).
- Couser RJ, Ferrara TB, Wheeler W, McNamara J, Falde B, Johnson K, Hoekstra RE. Pulmonary follow-up 2.5 years after a randomized, controlled, multiple dose bovine surfactant study of preterm newborn infants. *Pediatr Pulmonol* 1993 Mar; 15(3):163-7.
- de Zegher F, de Vries L, Pierrat V, Daniels H, Spitz B, Caser P, Devlieger H, Eggermont E. Effect of prenatal betamethasone/thyrotropin releasing hormone treatment on somatosensory evoked potentials in preterm newborns. *Pediatr Res* 1992 Aug;32(2):212-4.
- Dluholucky S, Babic J, Taufer I. Reduction of incidence and mortality of respiratory distress syndrome by administration of hydrocortisone to mother. *Arch Dis Child* 1976 Jun;51(6):420-3.
- Doyle LW, Kitchen WH, Ford GW, Rickards AL, Kelly EA. Antenatal steroid therapy and 5-year outcome of extremely low birth weight infants. *Obstet Gynecol* 1989 May;73(5 Pt 1):743-6.
- Doyle LW, Kitchen WH, Ford GW, Rickards AL, Lissenden JV, Ryan MM. Effects of antenatal steroid therapy on mortality and morbidity in very low birth weight infants. *J Pediatr* 1986 Feb; 108(2):287-92.
- Doyle LW, Permezel MJ, Kitchen WH. Is there a lower limit for birth-weight/gestational age and antenatal steroid therapy? *Aust N Z J Obstet Gynaecol* 1992 Aug;32(3):193-5. Comment in: *Aust N Z J Obstet Gynaecol* 1993 Feb;33(1):103-5.
- Dunn MS, Shennan AT, Hoskins EM, Lennox K, Enhorning G. Two-year follow-up of infants enrolled in a randomized trial of surfactant replacement therapy for prevention of neonatal respiratory distress syndrome. *Pediatrics* 1988 Oct;82(4):543-7.
- Effect of antenatal dexamethasone administration on the prevention of respiratory distress syndrome. *Am J Obstet Gynecol* 1981 Oct 1;141(3):276-87.
- Effects of antenatal dexamethasone administration in the infant: long-term follow-up. *J Pediatr* 1984 Feb; 104(2):259-67.

- Ens-Dokkum MH, Schreuder AM, Veen S, Verloove-Vanhorick SP, Brand R, Ruys JH. Evaluation of care for the preterm infant: review of literature on follow-up of preterm and low birthweight infants. Report from the collaborative Project on Preterm and Small for Gestational Age Infants (POPS) in the Netherlands. *Paediatr Perinat Epidemiol* 1992 Oct;6(4):434-59.
- Escobar GJ, Littenberg B, Petitti DB. Outcome among surviving very low birthweight infants: a meta-analysis. *Arch Dis Child* 1991 Feb;66(2):204-11.
- Fazzi E, Bianchini L, Ometto A, Piazza F, Rondini G, Lanzi G. [Infantile cerebral palsy and neuromotor development in very low birth weight infants]. *Minerva Pediatr* 1990 Jun;42(6):219-25. (Ita).
- Fazzi E, Orcesi S, Spinillo A, Stronati M, Telesca C, Farinotti L. [Neuropsychologic development of small for gestational age preterm infants: follow up at 12-36 months of age]. *Pediatr Med Chir* 1992 Jul-Aug;14(4):403-7. (Ita).
- Fernandez-Carrocera LA, Patino-Felix F, Udaeta-Mora E, Garza Morales S, Ibarra-Reyes MP, Rodriguez-Perez L. [Subependymal/intraventricular hemorrhage in preterm newborn infants. Neurodevelopmental course during the first year of life]. *Bol Med Hosp Infant Mex* 1993 Apr;50(4):241-7. (Spa).
- Ferrara TB, Hoekstra RE, Gaziano E, Knox GE, Couser RJ, Fangman JJ. Changing outcome of extremely premature infants (less than or equal to 26 weeks' gestation and less than or equal to 750 gm): survival and follow-up at a tertiary center. *Am J Obstet Gynecol* 1989 Nov;161(5):1114-8.
- Forslund M, Bjerre I. Follow-up of preterm children. I. Neurological assessment at 4 years of age. *Early Hum Dev* 1989 Sep;20(1):45-66.
- Fustinana C, Cernandas JC, Lopez N, Rodriguez D. Somatic growth in VLBW infants prenatally treated with betamethasone plus TRH [abstract]. *Pediatr Res* 1993;33(4 Pt 2):260a.
- Georgieff MK, Mills MM, Zempel CE, Chang PN. Catch-up growth, muscle and fat accretion, and body proportionality of infants one year after newborn intensive care. *J Pediatr* 1989 Feb; 114(2):288-92.
- Groome LJ, Goldenberg RL, Cliver SP, Davis RO, Copper RL. Neonatal periventricular-intraventricular hemorrhage after maternal beta-sympathomimetic tocolysis. The March of Dimes Multicenter Study Group. *Am J Obstet Gynecol* 1992 Oct;167(4 Pt 1):873-9.
- Hack M, Breslau N, Fanaroff AA. Differential effects of intrauterine and postnatal brain growth failure in infants of very low birth weight. *Am J Dis Child* 1989 Jan;143(1):63-8.
- Hack M, Horbar JD, Malloy MH, Tyson JE, Wright E, Wright L. Very low birth weight outcomes of the National Institute of Child Health and Human Development Neonatal Network. *Pediatrics* 1991 May;87(5):587-97. Comment in: *Pediatrics* 1992 Feb;89(2):357; discussion 357-8.
- Halsey CL, Collin MF, Anderson CL. Extremely low birth weight children and their peers: a comparison of preschool performance. *Pediatrics* 1993 Apr; 91(4):807-11.
- Horbar JD, Onstad L, Wright E. Predicting mortality risk for infants weighing 501 to 1500 grams at birth: a National Institutes of Health Neonatal Research Network report. *Crit Care Med* 1993 Jan;21(1):12-8. Comment in: *Crit Care Med* 1993 Jan;21(1):2-3.
- Horbar JD, Wright EC, Onstad L. Decreasing mortality associated with the introduction of surfactant therapy: an observational study of neonates weighing 601 to 1300 grams at birth. The Members of the National Institute of Child Health and Human Development Neonatal Research Network. *Pediatrics* 1993 Aug;92(2):191-6.
- Huel G, Keller E, Gueguen S, Robert C, Bouyer J, Papiernik E, Mamelle N, Laumon B, Munoz F, Collin D, et al. Effective prevention of preterm birth: the French experience measured at Haguenu. *Birth Defects* 1989;25(1):1-234.
- Hutson JM, Driscoll JM, Fox HE, Driscoll YT, Steir ME. The effect of obstetric management on neonatal mortality and morbidity for infants weighing 700-1000 grams. *Am J Perinatol* 1986 Jul;3(3):255-61.
- Improvement of outcome for infants of birth weight under 1000 g. The Victorian Infant Collaborative Study Group. *Arch Dis Child* 1991 Jul;66(7 Spec No):765-9.
- Jarvenpaa AL, Virtanen M, Pohjavuori M. The outcome of extremely low birthweight infants. *Ann Med* 1991 Dec;23(6):699-704.
- Jobe AH, Mitchell BR, Gunkel JH. Beneficial effects of the combined use of prenatal corticosteroids and postnatal surfactant on preterm infants. *Am J Obstet Gynecol* 1993 Feb;168(2):508-13.
- Johnson DE, Munson DP, Thompson TR. Effect of antenatal administration of dexamethasone on hospital cost and survival of premature infants. *Pediatrics* 1981;68:633-7.
- Kari MA, Hallman M, Eronon M, Teramo K, Virtanen M, Koivisto N, Ikonen RS. Prenatal dexamethasone treatment in conjunction with rescue therapy of human surfactant - a randomized placebo-controlled multicenter study. *Pediatrics*. Forthcoming 1994.

- Kari MA, Hallman M, Eronen M, Teramo K, Virtanen M, Koivisto M, Ikonen RS. Prenatal steroid in conjunction with human surfactant therapy: a randomized multicenter study [abstract]. *Pediatr Res* 1993;33:217A.
- Kitchen WH, Bowman E, Callanan C, Campbell NT, Carse EA, Charlton M, Doyle LW, Drew J, Ford GW, Gore J, et al. The cost of improving the outcome for infants of birthweight 500-999 g in Victoria. The Victorian Infant Collaborative Study Group. *J Paediatr Child Health* 1993 Feb;29(1):56-62.
- Kitchen WH, Doyle LW, Rickards AL, Ford G, Kelly E, Callanan C. Survivors of extreme prematurity--outcome at 8 years of age. *Aust N Z J Obstet Gynaecol* 1991 Nov;31(4):337-9.
- Kitchen WH, Rickards AL, Doyle LW, Ford GW, Kelly EA, Callanan C. Improvement in outcome for very low birthweight children: apparent or real? *Med J Aust* 1992 Aug 3;157(3):154-8.
- Klein NK, Hack M, Breslau N. Children who were very low birth weight: development and academic achievement at nine years of age. *J Dev Behav Pediatr* 1989 Feb;10(1):32-7.
- Konishi M, Chida S, Shimada S, Kasai T, Murakami Y, Cho K, Fujii Y, Maeta H, Fujiwara T. Surfactant replacement therapy in premature babies with respiratory distress syndrome: factors affecting the response to surfactant and comparison of outcome from 1982-86 and 1987-91. *Acta Paediatr Jpn* 1992 Dec;34(6):617-30.
- Lee H, Barratt MS. Cognitive development of preterm low birth weight children at 5 to 8 years old. *J Dev Behav Pediatr* 1993 Aug;14(4):242-9.
- Lenclen R, Paupe A, Carbajal R, Blanc P, Hoenn E, Olivier-Martin M. [The fate of very early premature babies. Mortality, morbidity and 2-year follow-up in a population of 96 very early premature babies]. *Rev Fr Gynecol Obstet* 1992 Nov;87(11):533-9. (Fre).
- Leonard CH, Clyman RI, Piecuch RE, Juster RP, Ballard RA, Behle MB. Effect of medical and social risk factors on outcome of prematurity and very low birth weight. *J Pediatr* 1990 Apr;116(4):620-26.
- Leonard CH, Clyman RI, Piecuch RE, Juster RP, Ballard RA, Behle MB. Effect of medical and social risk factors on outcome of prematurity and very low birth weight. *J Pediatr* 1990 Apr;116(4):620-6.
- Levin S, Robinson A, Zakut H. The psychomotor development of full term infants whose mothers were treated with glucocorticosteroids during pregnancy. *Pediatr Padol* 1986;21(3):233-9.
- Liggins GC. Obstetric and paediatric collaboration to reduce morbidity after preterm birth. *Br J Obstet Gynaecol* 1990 Jan;97(1):1-3. Comment on: *Br J Obstet Gynaecol* 1990 Jan;97(1):11-25.
- Lipper EG, Ross GS, Auld PA, Glassman MB. Survival and outcome of infants weighing less than 800 grams at birth. *Am J Obstet Gynecol* 1990 Jul;163(1 Pt 1):146-50. Comment in: *Am J Obstet Gynecol* 1991 Aug;165(2):482-3; *Am J Obstet Gynecol* 1991 Oct;165(4 Pt 1):1159-60.
- Litt R, Seidman DS, Gross-Tsur V, Dollberg S, Gale R. A 2-year prospective study of very low birthweight infants. *Isr J Med Sci* 1992 Nov; 28(11):783-8.
- Lya den Ouden A, Hille ET, Bauer L, Verloove-Vanhorick SP. School performance in very preterm children [letter]. *Lancet* 1993 Aug 28;342(8870):550-1.
- MacArthur B, Howie RN, DeZoete A, Elkins J, Liang AY. Long-term follow-up of children exposed to betamethasone in utero. In: Tejani N, editor. *Obstetrical events and developmental sequelae*. Boca Raton (FL): CRC Press; 1990. p. 81-9.
- MacArthur BA, Howie RN, Dezoete JA, Elkins J. Cognitive and psychosocial development of 4-year-old children whose mothers were treated antenatally with betamethasone. *Pediatrics* 1981 Nov;68(5):638-43.
- MacArthur BA, Howie RN, Dezoete JA, Elkins J. School progress and cognitive development of 6-year-old children whose mothers were treated antenatally with betamethasone. *Pediatrics* 1982 Jul;70(1):99-105.
- Manzke H. [Unpreventable effects of neonatal intensive care on the later development of extremely small premature infants]. *Z Geburtshilfe Perinatol* 1992 Jul-Aug;196(4):165-72. (Ger).
- Marlow N, Roberts L, Cooke R. Outcome at 8 years for children with birth weights of 1250 g or less. *Arch Dis Child* 1993 Mar;68(3 Spec No):286-90.
- McCormick MC. Has the prevalence of handicapped infants increased with improved survival of the very low birth weight infant? *Clin Perinatol* 1993 Mar; 20(1):263-77.
- McCormick MC, Brooks-Gunn J, Workman-Daniels K, Turner J, Peckham GJ. The health and developmental status of very low-birth-weight children at school age. *JAMA* 1992 Apr 22-29; 267(16):2204-8.
- Morley CJ, Morley R. Follow up of premature babies treated with artificial surfactant (ALEC). *Arch Dis Child* 1990 Jul;65(7 Spec No):667-9.

- Msall ME, Buck GM, Rogers BT, Catanzaro NL. Kindergarten readiness after extreme prematurity. *Am J Dis Child* 1992 Nov;146(11):1371-5.
- Msall ME, Buck GM, Rogers BT, Merke D, Catanzaro NL, Zorn WA. Risk factors for major neurodevelopmental impairments and need for special education resources in extremely premature infants. *J Pediatr* 1991 Oct;119(4):606-14. Published erratum appears in *J Pediatr* 1992 May;120(5):838.
- Needelman HW. Developmental follow-up of the low birth weight NICU graduate. *Nebr Med J* 1992 Dec;77(12):343-4.
- Nwaesei CG, Young DC, Byrne JM, Vincer MJ, Sampson D, Evans JR, Allen AC, Stinson DA. Preterm birth at 23 to 26 weeks' gestation: is active obstetric management justified? *Am J Obstet Gynecol* 1987 Oct;157(4 Pt 1):890-7.
- Oberklaid F, Sewell J, Sanson A, Prior M. Temperament and behavior of preterm infants: a six-year follow-up. *Pediatrics* 1991 Jun;87(6):854-61.
- Oosterbaan HP, Swaab DF. [Glucocorticoids in pregnancy: effect on the fetus and neonate (letter)]. *Ned Tijdschr Geneesk* 1987 Jan 24;131(4):170-1. (Dut).
- Paneth N, Guillemin J, Harrison H, Campbell N, Mercier CE. Roundtable: survival and outcome of the extremely low-birthweight infant. *Birth* 1992 Sep;19(3):154-61.
- Papageorgiou A, Stern L. Antenatal prevention of the neonatal respiratory distress syndrome: benefits and potential risks for the mother and the infant. *J Perinat Med* 1986;14(2):75-86.
- Papageorgiou AN, Colle E, Farri-Kostopoulos E, Gelfand MM. Incidence of respiratory distress syndrome following antenatal betamethasone: role of sex, type of delivery, and prolonged rupture of membranes. *Pediatrics* 1981 May;67(5):614-7.
- Papageorgiou AN, Doray J-L, Ardilis R, Kunos I. Reduction of mortality, morbidity and respiratory distress syndrome in infants weighing less than 1,000 grams by treatment with betamethasone and ritodrine. *Pediatrics* 1989;83:493-7.
- Pramanik AK, Holtzman RB, Merritt TA. Surfactant replacement therapy for pulmonary diseases. *Pediatr Clin North Am* 1993 Oct;40(5):913-36.
- Resnick MB, Roth J, Ariet M, Carter RL, Emerson JC, Hendrickson JM, Packer AB, Larsen JJ, Wolking WD, Lucas M, et al. Educational outcome of neonatal intensive care graduates. *Pediatrics* 1992 Mar;89(3):373-8.
- Robertson B, Curstedt T, Tubman R, Strayer D, Berggren P, Kok J, Koppe J, van Sonderen L, Halliday H, McClure G, et al. A 2-year follow up of babies enrolled in a European multicentre trial of porcine surfactant replacement for severe neonatal respiratory distress syndrome. Collaborative European Multicentre Study Group. *Eur J Pediatr* 1992 May;151(5):372-6.
- Rosenberg AA. Neonatal and infant problems of low birth weight. *Curr Opin Obstet Gynecol* 1991 Feb;3(1):8-14.
- Ross G, Lipper EG, Auld PA. Educational status and school-related abilities of very low birth weight premature children. *Pediatrics* 1991 Dec;88(6):1125-34.
- Ross G, Lipper EG, Auld PA. Social competence and behavior problems in premature children at school age. *Pediatrics* 1990 Sep;86(3):391-7.
- Saigal S, Szatmari P, Rosenbaum P, Campbell D, King S. Cognitive abilities and school performance of extremely low birth weight children and matched term control children at age 8 years: a regional study. *J Pediatr* 1991 May;118(5):751-60.
- Schmand B, Neuvel J, Smolders-de Haas H, Hoeks J, Treffers PE, Koppe JG. Psychological development of children who were treated antenatally with corticosteroids to prevent respiratory distress syndrome. *Pediatrics* 1990 Jul;86(1):58-64.
- Schreuder AM, Veen S, Ens-Dokkum MH, Verloove-Vanhorick SP, Brand R, Ruys JH. Standardised method of follow-up assessment of preterm infants at the age of 5 years: use of the WHO classification of impairments, disabilities and handicaps. Report from the collaborative Project on Preterm and Small for gestational age infants (POPS) in The Netherlands, 1983. *Paediatr Perinat Epidemiol* 1992 Jul;6(3):363-80.
- Scott DT, Spiker D. Research on the sequelae of prematurity: early learning, early interventions and later outcomes. *Semin Perinatol* 1989 Dec;13(6):495-505.
- Smedler AC, Faxelius G, Bremme K, Lagerstrom M. Psychological development in children born with very low birth weight after severe intrauterine growth retardation: a 10-year follow-up study. *Acta Paediatr* 1992 Mar;81(3):197-203.
- Smolders-de Haas H, Neuvel J, Schmand B, Treffers PE, Koppe JG, Hoeks J. Physical development and medical history of children who were treated antenatally with corticosteroids to prevent respiratory distress syndrome: a 10- to 12-year follow-up. *Pediatrics* 1990 Jul;86(1):65-70.
- Sten R, Vik T, Brubakk AM. [Mortality and functional disabilities among children with birth weight lower than 1500 g. Changes during 1983-88 at the

- neonatal unit of the Trondheim regional hospital]. *Tidsskr Nor Laegeforen* 1992 Feb 28; 112(6):745-9. (Nor).
- Stewart AL, Costello AM, Hamilton PA, Baudin J, Townsend J, Bradford BC, Reynolds EO. Relationship between neurodevelopmental status of very preterm infants at one and four years. *Dev Med Child Neurol* 1989 Dec;31(6):756-65.
- Stjernqvist K, Svenningsen NW. Extremely low-birth-weight infants less than 901 g. Growth and development after one year of life. *Acta Paediatr* 1993 Jan;82(1):40-4.
- van Zeben-van der Aa TM, Verloove-Vanhorick SP, Brand R, Ruys JH. Morbidity of very low birthweight infants at corrected age of two years in a geographically defined population. Report from Project on Preterm and Small for gestational age infants in The Netherlands. *Lancet* 1989 Feb 4; 1(8632):253-5. Comment in: *Lancet* 1989 Mar 4; 1(8636):499-500; *Lancet* 1989 Apr 22;1(8643):900.
- Vaucher YE, Harker L, Merritt TA, Hallman M, Gist K, Bejar R, Heldt GP, Edwards D, Pohjavuori M. Outcome at twelve months of adjusted age in very low birth weight infants with lung immaturity: a randomized, placebo-controlled trial of human surfactant. *J Pediatr* 1993 Jan;122(1):126-32.
- Vaucher YE, Merritt TA, Hallman M, Jarvenpaa AL, Telsey AM, Jones BL. Neurodevelopmental and respiratory outcome in early childhood after human surfactant treatment. *Am J Dis Child* 1988 Sep; 142(9):927-30.
- Veelken N, Stollhoff K, Claussen M. Development and perinatal risk factors of very low-birth-weight infants. Small versus appropriate for gestational age. *Neuropediatrics* 1992 Apr;23(2):102-7.
- Veen S, Ens-Dokkum MH, Schreuder AM, Verloove-Vanhorick SP, Brand R, Ruys JH. Impairments, disabilities, and handicaps of very preterm and very-low-birthweight infants at five years of age. The Collaborative Project on Preterm and Small for Gestational Age Infants (POPS) in The Netherlands. *Lancet* 1991 Jul 6;338(8758):33-6. Comment in: *Lancet* 1991 Aug 24; 338(8765):511-2.
- Verma AH, El-Mousley Z, Ross RD. Prenatal administration of betamethasone s in very low birth weight infants vlbi: risk vs benefits [abstract]. *Pediatr Res* 1993;33(4 Pt 2):254a.
- The Vermont-Oxford Trials Network: very low birth weight outcomes for 1990. Investigators of the Vermont-Oxford Trials Network Database Project. *Pediatrics* 1993 Mar;91(3):540-5.
- Ware J, Taesch HW, Soll RF, McCormick MC. Health and developmental outcomes of a surfactant controlled trial: follow-up at 2 years. *Pediatrics* 1990 Jun;85(6):1103-7. Published erratum appears in *Pediatrics* 1991 Mar;87(3):412. Comment in: *Pediatrics* 1991 Mar;87(3):412.
- Wariyar U, Richmond S, Hey E. Pregnancy outcome at 24-31 weeks' gestation: neonatal survivors. *Arch Dis Child* 1989 May;64(5):678-86.
- Wariyar UK, Richmond S. Morbidity and preterm delivery: importance of 100% follow-up [letter]. *Lancet* 1989 Feb 18;1(8634):387-8.
- Weltd E. [Follow-up of high-risk newborn infants]. *Rev Chil Pediatr* 1992;63 Suppl 1:15-6. (Spa).
- Weltd E, Valenzuela B, Angulo G, Munoz E, Gomez S, Levy ML, Rosselot S, Norambuena N. [Follow-up of infants with birth weight under 1,500 g]. *Rev Chil Pediatr* 1989 May-Jun;60(3):129-34. (Spa).
- White AD, Andrews ED, Weinberg JM, Wold DE, Long WA. The Exosurf Neonatal TIND Study Group. Factors associated with intraventricular hemorrhage (IVH) in the exosurf neonatal treatment IND (TIND) [abstract]. *Pediatr Res* 1992;31: 263A.
- Whyte HE, Fitzhardinge PM, Shennan AT, Lennox K, Smith L, Lacy J. Extreme immaturity: outcome of 568 pregnancies of 23-26 weeks' gestation. *Obstet Gynecol* 1993 Jul;82(1):1-7.

Pharmacology

- Addison RS, Maguire DJ, Mortimer RH, Roberts MS, Cannell GR. Pathway and kinetics of prednisolone metabolism in the human placenta. *J Steroid Biochem Mol Biol* 1993 Mar;44(3):315-20.
- Ametov AS, Chechkova OB, Samsygina GA, Chernukha VA, Kazakova LE. [Hypophyseal, thyroid and adrenal cortical hormone levels in the blood serum of newborn infants in the early neonatal period]. *Pediatriia* 1985 Sep;(9):20-2. (Rus).
- Anlar Y, Anlar B. The effect of dexamethasone on neutrophil adherence in umbilical cord blood. *Early Hum Dev* 1987 Sep;15(5):265-8.
- Bacigalupo G, Langner K, Schmidt S, Saling E. Plasma immunoreactive beta-endorphin, ACTH and cortisol concentrations in mothers and their neonates immediately after delivery--their relationship to the duration of labor. *J Perinat Med* 1987;15(1):45-52.
- Bagnoli F, Bruchi S, Garosi G, Caniggia I, Inaudi PA. [Phenomenon of neonatal adaptation: progesterone, ACTH and cortisol during the 1st 24 hours of life]. *Boll Soc Ital Biol Sper* 1988 Apr;64(4):317-22. (Ita).
- Ballard PL, Ballard RA, Creasy RK, Padbury J, Polk DH, Bracken M, Moya FR, Gross I. Plasma thyroid hormones and prolactin in premature infants and their mothers after prenatal treatment with thyrotropin-releasing hormone. *Pediatr Res* 1992 Dec;32(6):673-8.
- Ballard PL, Granberg P, Ballard RA. Glucocorticoid levels in maternal and cord serum after prenatal betamethasone therapy to prevent respiratory distress syndrome. *J Clin Invest* 1975 Dec;56(6):1548-54.
- Boggaram V, Smith ME, Mendelson CR. Posttranscriptional regulation of surfactant protein-A messenger RNA in human fetal lung in vitro by glucocorticoids. *Mol Endocrinol* 1991 Mar;5(3):414-23.
- Boggaram V, Smith ME, Mendelson CR. Regulation of expression of the gene encoding the major surfactant protein (SP-A) in human fetal lung in vitro. Disparate effects of glucocorticoids on transcription and on mRNA stability. *J Biol Chem* 1989 Jul 5;264(19):11421-7.
- Branchaud CL, Goodyer CG, Shore P, Lipowski LS, Lefebvre Y. Functional zonation of the midgestation human fetal adrenal cortex: fetal versus definitive zone use of progesterone for cortisol synthesis. *Am J Obstet Gynecol* 1985 Jan 15;151(2):271-7.
- Broide E, Bistrizter T, Livne M, Neuman M, Goldberg M, Aladjem M. The effect of prenatal administration of dexamethasone and ritodrine on cord blood cortisol and glucose concentrations in premature infants with respiratory distress syndrome. *J Perinat Med* 1992;20(4):289-95.
- Burkart W, Dame WR, Holzgreve W, Schneider HP. [Significance of hormones in the amniotic fluid. II. STH and corticoids]. *Geburtshilfe Frauenheilkd* 1985 Nov;45(11):809-12. (Ger).
- Chan EC, Smith R, Lewin T, Brinsmead MW, Zhang HP, Cubis J, Thornton K, Hurt D. Plasma corticotropin-releasing hormone, beta-endorphin and cortisol inter-relationships during human pregnancy. *Acta Endocrinol (Copenh)* 1993 Apr;128(4):339-44.
- Charnvise S, Fencel MD, Osathanondh R, Zhu MG, Underwood R, Tulchinsky D. Adrenal steroids in maternal and cord blood after dexamethasone administration at midterm. *J Clin Endocrinol Metab* 1985 Dec;61(6):1220-2.
- Chernukha EA, Komissarova LM, Malysheva VA, Abubakirova AM, Galstian AA. [Cortisol contents in maternal and umbilical artery blood during delivery of low birth weight fetuses]. *Akush Ginekol (Mosk)* 1989 Jan;(1):26-30. (Rus).
- Chockalingam U, Murphy E, Ophoven JC, Georgieff MK. The influence of gestational age, size for dates, and prenatal steroids on cord transferrin levels in newborn infants. *J Pediatr Gastroenterol Nutr* 1987 Mar-Apr;6(2):276-80.
- Cooke R, Ryan S, Walkinshaw S. Steroids for babies [letter]. *Lancet* 1993 Feb 27;341(8844):569.
- Crowley P. Promoting pulmonary maturity. In: Chalmers I, Enkin M, Keirse MJ, editors. *Effective care in pregnancy and childbirth*. New York: Oxford University Press; 1989. p. 746-64.
- Darne FJ, McGarrigle HH, Lachelin GC. Diurnal variation of plasma and saliva oestrogen, progesterone, cortisol and plasma dehydroepiandrosterone sulphate in late pregnancy. *Eur J Obstet Gynecol Reprod Biol* 1989 Aug;32(2):57-66.
- Davies DP. Placental insufficiency and its effect on the fetus and adult disease [letter]. *Lancet* 1993 Mar 27;341(8848):827. Comment on: *Lancet* 1993 Feb 6;341(8841):355-7.
- de Graeff-Meeder ER, Wit JM. [Glucocorticoids in pregnancy: effects on the fetus and newborn infant]. *Ned Tijdschr Geneesk* 1986 Nov 29;130(48):2168-71. (Dut).
- Dorr HG, Sippell WG, Versmold HT, Bidlingmaier F, Knorr D. Plasma aldosterone and 11-deoxycortisol in term neonates: a reevaluation. *J Clin Endocrinol Metab* 1987 Jul;65(1):208-10.
- Dorr HG, Sippell WG, Versmold HT, Bidlingmaier F, Knorr D. Plasma mineralocorticoids,

- glucocorticoids, and progestins in premature infants: longitudinal study during the first week of life. *Pediatr Res* 1988 May;23(5):525-9.
- Dorr HG, Versmold HT, Bidlingmaier F, Sippell WG. Adrenocortical steroids in small-for-gestational-age term infants during the early neonatal period. *Pediatr Res* 1989 Feb;25(2):115-8.
- Dorr HG, Versmold HT, Sippell WG, Bidlingmaier F, Knorr D. Antenatal betamethasone therapy: effects on maternal, fetal, and neonatal mineralocorticoids, glucocorticoids, and progestins. *J Pediatr* 1986 Jun;108(6):990-3.
- Economides DL, Nicolaides KH, Linton EA, Perry LA, Chard T. Plasma cortisol and adrenocorticotropin in appropriate and small for gestational age fetuses. *Fetal Ther* 1988;3(3):158-64.
- Endoh A. Trend analysis of serum progesterone, deoxycorticosterone, deoxycorticosterone sulfate, cortisol, corticosterone, 18-hydroxydeoxycorticosterone and estradiol in early neonates. *Endocrinol Jpn* 1989 Dec;36(6):851-8.
- Farquharson RG, Dyas J, Pierrepoint CG. Cortisol concentrations in the umbilical artery and vein of breech-presenting infants at term in relation to the method of delivery. *Br J Obstet Gynaecol* 1985 Oct;92(10):1040-3.
- Feldman D. Mechanism of action of cortisol. In: DeGroot LJ, et al., editors. *Endocrinology*. 2nd ed. Philadelphia: Saunders; 1989. p. 1557-71.
- Ferrari S, Zacchê G, Zanini F, Rosignoli R, Corgnati A, Rossi L, Gaioni L. [Controlled study on the prevention of respiratory distress syndrome with betamethasone in pregnancy and ACTH and cortisol levels in the premature newborn infant]. *Pediatr Med Chir* 1985 Mar-Apr;7(2):279-82. (Ita).
- Georgieff MK, Chockalingam UM, Sasanow SR, Gunter EW, Murphy E, Ophoven JJ. The effect of antenatal betamethasone on cord blood concentrations of retinol-binding protein, transthyretin, transferrin, retinol, and vitamin E. *J Pediatr Gastroenterol Nutr* 1988 Sep-Oct;7(5):713-7.
- Georgieff MK, Mammel MC, Mills MM, Gunter EW, Johnson DE, Thompson TR. Effect of postnatal steroid administration on serum vitamin A concentrations in newborn infants with respiratory compromise. *J Pediatr* 1989 Feb;114(2):301-4.
- Georgieff MK, Sasanow SR, Mammel MC, Ophoven J, Pereira GR. Cord prealbumin values in newborn infants; effect of prenatal steroids, pulmonary maturity and size for dates. *J Pediatr* 1986; 108(6):972-6.
- Goland RS, Conwell IM, Warren WB, Wardlaw SL. Placental corticotropin-releasing hormone and pituitary-adrenal function during pregnancy. *Neuroendocrinology* 1992;56(5):742-9.
- Goland RS, Wardlaw SL, Blum M, Tropper PJ, Stark RI. Biologically active corticotropin-releasing hormone in maternal and fetal plasma during pregnancy. *Am J Obstet Gynecol* 1988;159(4):884-90.
- Gonzales LW, Ballard PL, Ertsey R, Williams MC. Glucocorticoids and thyroid hormones stimulate biochemical and morphological differentiation of human fetal lung in organ culture. *J Clin Endocrinol Metab* 1986 Apr;62(4):678-91.
- Goretzlehner G, Wodrig W, Goretzlehner U. [Sex-specific differences in the cortisol level post-partum]. *Z Geburtshilfe Perinatol* 1987 Mar-Apr;191(2):71-2. (Ger).
- Goretzlehner U, Wodrig W. [Diurnal rhythm of cortisol following spontaneous labor]. *Zentralbl Gynakol* 1987;109(12):802-4. (Ger).
- Haning RV Jr, Curet LB, Poole WK, Boehnlein LM, Kuzma DL, Meier SM. Effects of fetal sex and dexamethasone on preterm maternal serum concentrations of human chorionic gonadotropin, progesterone, estrone, estradiol, and estriol. *Am J Obstet Gynecol* 1989 Dec;161(6 Pt 1):1549-53.
- Hanna CE, Keith LD, Colasurdo MA, Buffkin DC, Laird MR, Mandel SH, Cook DM, LaFranchi SH, Reynolds JW. Hypothalamic pituitary adrenal function in the extremely low birth weight infant. *J Clin Endocrinol Metab* 1993 Feb;76(2):384-7.
- Hercz P. Quantitative changes in steroid and peptide hormones in the maternal-fetoplacental system between the 28th-40th weeks of pregnancy. *Acta Med Hung* 1985;42(1-2):29-39.
- Hercz P, Siklos P, Ungar L. Serum cortisol level changes in the maternal-fetoplacental unit between the 28th-40th weeks of pregnancy. *Acta Physiol Hung* 1987;69(2):161-5.
- Hercz P, Siklos P, Ungar L. Serum dehydroepiandrosterone and cortisol concentration in the maternal-fetoplacental hormonal system in elective caesarean section and spontaneous vaginal delivery in the 28th to 36th and 40th weeks of pregnancy. *Gynecol Obstet Invest* 1990;29(2):112-4.
- Homoki J, Limmer G, Teller WM. Influence of maternal antenatal treatment with betamethasone on the postnatal adrenal status in preterm infants. In: Gorog S, editor. *Advances in steroid analysis '90*. 4th Symposium of the Analysis of Steroids; 1990 Apr 24-26; Pecs, Hungary. Budapest: Akademiai Kiado; 1991. p. 333-8.

- Hustead VA, Zachman RD. The effect of antenatal dexamethasone on maternal and fetal retinol-binding protein. *Am J Obstet Gynecol* 1986 Jan;154(1):203-5.
- Ipsiroglu OS, Semmelrock J, Gmoser G, Stockler S, Rosegger H. [The value of umbilical cord blood cortisol]. *Gynakol Rundsch* 1990;30 Suppl 1:197-8. (Ger).
- Jaskiewicz J, Szafran Z, Szafran H, Sztefko K, Sucharski P. The relation between growth hormone, cortisol and insulin and plasma levels of free fatty acids and glucose in healthy mothers at delivery and their newborn children. *Endokrynol Pol* 1985;36(4):205-13.
- Jones SA, Brooks AN, Challis JR. Steroids modulate corticotropin-releasing hormone production in human fetal membranes and placenta. *J Clin Endocrinol Metab* 1989 Apr;68(4):825-30.
- Kairalla AB. Hypothalamic-pituitary-adrenal axis function in premature neonates after extensive prenatal treatment with betamethasone: a case history. *Am J Perinatol* 1992 Sep-Nov;9(5-6):428-30.
- Kerepesi T, Aranyi P. Low levels of glucocorticoid binding sites in circulating lymphocytes of premature infants suffering from hyaline membrane disease. *J Steroid Biochem* 1985 Feb;22(2):151-4.
- Khairullin RM, Khlystova ZS, Kuznetsova LV. [Kinetics of T-lymphocytes and cortisol in the blood of the human fetus]. *Akush Ginekol (Mosk)* 1987 Jan;(1):60-1. (Rus).
- Kraiem Z, Sack J, Brish M. Serum cortisol levels: the first 10 days in full-term and preterm infants. *Isr J Med Sci* 1985 Feb;21(2):170-2.
- Kubota T, Tsuzuki H, Saito M. Determination of prolactin, growth hormone, beta-endorphin, and cortisol in both maternal plasma and amniotic fluid during human gestation. *Acta Endocrinol (Copenh)* 1989 Aug;121(2):297-303.
- Kuznetsova LV. [Adrenal glucocorticoid function and its regulation in human prenatal ontogeny and in the 1st week of life]. *Biull Eksp Biol Med* 1987 Jul;104(7):11-3. (Rus).
- Laatikainen T, Virtanen T, Kaaja R, Salminen-Lappalainen K. Corticotropin-releasing hormone in maternal and cord plasma in pre-eclampsia. *Eur J Obstet Gynecol Reprod Biol* 1991 Mar 21;39(1):19-24.
- Lao TT, Panesar NS. The effect of labour on prolactin and cortisol concentrations in the mother and the fetus. *Eur J Obstet Gynecol Reprod Biol* 1989 Mar;30(3):233-8.
- Laudat MH, Guilhaume B, Blot P, Fournier C, Giaque JP, Luton JP. [The hormonal state of pregnancy: modification of cortisol and testosterone]. *Ann Endocrinol (Paris)* 1987;48(4):334-8. (Fre).
- Lauterbach R, Szafran H, Szafran Z. Blood glucose concentration and the levels of cortisol, growth hormone and insulin in women at labour and their healthy neonates born by vaginal delivery and cesarean section. *Endokrynol Pol* 1988;39(4):169-79.
- Liley HG, Hawgood S, Wellenstein GA, Benson B, White RT, Ballard PL. Surfactant protein of molecular weight 28,000-36,000 in cultured human fetal lung: cellular localization and effect of dexamethasone. *Mol Endocrinol* 1987 Mar;1(3):205-15.
- Liley HG, White RT, Benson BJ, Ballard PL. Glucocorticoids both stimulate and inhibit production of pulmonary surfactant protein A in fetal human lung. *Proc Natl Acad Sci U S A* 1988 Dec;85(23):9096-100.
- Liley HG, White RT, Warr RG, Benson BJ, Hawgood S, Ballard PL. Regulation of messenger RNAs for the hydrophobic surfactant proteins in human lung. *J Clin Invest* 1989 Apr;83(4):1191-7.
- Lohninger A, Krieglsteiner HP, Salzer H, Erhardt E, Kaiser E. Role of L carnitine in perinatal metabolism and effects of L carnitine administration on dipalmitoyl phosphatidylcholine content in fetal rat lungs and human amniotic fluid. In: Kaiser E, Lohninger A, editors. *Carnitine: its role in lung and heart disorders. Satellite symposium, Central European Congress for Anesthesiology; 1985 Sep 13; Graz, Austria.* New York: S. Karger; 1987. p. 66-99.
- Lopez Bernal A, MacKenzie IZ. Corticosteroid levels in human fetal blood at midgestation and at term. *Am J Obstet Gynecol* 1987 Jan;156(1):112-3.
- Lopez Bernal A, Turnbull AC. Cortisol metabolism in human placenta and decidua is resistant to anoxia. *Horm Metab Res* 1985 Mar;17(3):167.
- Lorenz U, Jurgens S, Ragosch V, Kipper-Kreissl B, Weitzel H. [Medical prevention of respiratory distress syndrome]. *Gynakologe* 1991 Aug;24(4):223-7. (Ger).
- Maher J, Goldenberg R, Cliver S, Davis R, Copper R. Corticosteroid efficacy in very premature infants [abstract]. *Am J Obstet Gynecol* 1993;168(1 Pt 2):374.
- Metzger DL, Wright NM, Veldhuis JD, Rogol AD, Kerrigan JR. Characterization of pulsatile secretion and clearance of plasma cortisol in premature and term neonates using deconvolution analysis. *J Clin Endocrinol Metab* 1993 Aug;77(2):458-63.

- Murphy BE, Clark SJ, Donald IR, Pinsky M, Vedady D. Conversion of maternal cortisol to cortisone during placental transfer to the human fetus. *Am J Obstet Gynecol* 1974 Feb 15;118(4):538-41.
- Nahoul K, Daffos F, Forestier F, Chartier M, Scholler R. Plasma corticosteroid patterns in the fetus. *J Steroid Biochem* 1988 Jun;29(6):635-40.
- Nahoul K, Daffos F, Forestier F, Dehennin L. Corticosteroid sulfates in fetus plasma. *J Steroid Biochem* 1989 Oct;33(4A):613-9.
- Nahoul K, Daffos F, Forestier F, Scholler R. Cortisol, cortisone and dehydroepiandrosterone sulfate levels in umbilical cord and maternal plasma between 21 and 30 weeks of pregnancy. *J Steroid Biochem* 1985 Oct;23(4):445-50.
- Neri A, Merlob P, Kaplan B, Ovadia Y, Kaufman H. Maternal and cord plasma cortisol and aldosterone levels at delivery, in various ethnic groups in Israel. Preliminary report. *Isr J Med Sci* 1986 Jul-Aug; 22(7-8):576-8.
- Novak Z, Varga SI, Kovacs L, Pal A, Pataki L, Matkovics B. The effects of Oradexone and Ambroxol pretreatment of the oxidative sensitivity of the red blood cells in preterm infants. *Clin Chim Acta* 1989 Jul 14;182(3):241-5.
- Okamoto E, Takagi T, Makino T, Sata H, Iwata I, Nishino E, Mitsuda N, Sugita N, Otsuki Y, Tanizawa O. Immunoreactive corticotropin-releasing hormone, adrenocorticotropin and cortisol in human plasma during pregnancy and delivery and postpartum. *Horm Metab Res* 1989 Oct;21(10): 566-72.
- Oosterbaan HP, Swaab DF. [Glucocorticoids in pregnancy: effect on the fetus and neonate (letter)]. *Ned Tijdschr Geneesk* 1987 Jan 24;131(4):170-1. (Dut).
- Partsch CJ, Sippell WG, MacKenzie IZ, Aynsley-Green A. The steroid hormonal milieu of the undisturbed human fetus and mother at 16-20 weeks gestation. *J Clin Endocrinol Metab* 1991;73(5):969-74.
- Petersen MC, Nation RL, Ashley JJ, McBride WG. The placental transfer of betamethasone. *Eur J Clin Pharmacol* 1980 Oct;18(3):245-7.
- Pohjavuori M, Rovamo L, Laatikainen T. Plasma immunoreactive beta-endorphin and cortisol in the newborn infant after elective caesarean section and after spontaneous labour. *Eur J Obstet Gynecol Reprod Biol* 1985 Feb;19(2):67-74.
- Procianoy RS, Cecin SKG. The influence of labor and delivery on preterm fetal adrenal function. *Acta Paediatr Scand* 1985;74(3):400-4.
- Procianoy RS, Cecin SK. Umbilical cord dehydroepiandrosterone sulfate and cortisol levels in preterm infants born to pre-eclamptic mothers. *Acta Paediatr Scand* 1986 Mar;75(2):279-82.
- Rennie JM, Baker B, Lucas A. Does dexamethasone suppress the ACTH response in preterm babies? *Arch Dis Child* 1989 Apr;64(4):612-3. Comment in: *Arch Dis Child* 1989 Oct;64(10):1514-5.
- Reynolds GJ, Yu VY, Doery J. Does dexamethasone suppress the ACTH response in preterm babies? [letter]. *Arch Dis Child* 1989 Oct;64(10):1514-5. Comment on: *Arch Dis Child* 1989 Apr;64(4): 612-3.
- Robinson BG, Emanuel RL, Frim DM, Majzoub JA. Glucocorticoid stimulates expression of corticotropin-releasing hormone gene in human placenta. *Proc Natl Acad Sci U S A* 1988 Jul; 85(14):5244-8.
- Rokicki W, Krasnodebski J. Antenatal glucocorticoid administration and neonatal glycemia. *Dev Pharmacol Ther* 1987;10(4):307-11.
- Ruth V, Hallman M, Laatikainen T. Corticotropin-releasing hormone and cortisol in cord plasma in relation to gestational age, labor, and fetal distress. *Am J Perinatol* 1993 Mar;10(2): 115-8.
- Saito K, Nishijima M, Horiuchi S. [Changes in glucocorticoid receptor in human placentas: correlation with cortisol levels in maternal and umbilical cord plasma]. *J Iwatuw Med Assoc* 1990; 42(6):837-46. (Jpn).
- Salzer H, Weidinger H, Simbruner G, Vytiska-Binstorfer E. [Ambroxol versus betamethasone for stimulating antepartal lung maturity--a multicenter study]. *Z Geburtshilfe Perinatol* 1986 Feb-Mar;190(1):49-59. (Ger).
- Siamopoulou-Mavridou A, Mavridis AK, Vizandiadis A, Harsoulis P. Free urinary cortisol immunoreactive levels in premature and full term infants. *Acta Paediatr Scand* 1986 Nov;75(6): 919-22.
- Sinkin RA, Phelps DL. New strategies for the prevention of bronchopulmonary dysplasia. *Clin Perinatol* 1987 Sep;14(3):599-620.
- Suzuki A, Hashino M, Chiba H, Saito H, Notake Y, Yanaihara T, Nakayama T. [Correlation between the levels of catecholamines (noradrenaline, adrenaline) and adrenal steroids (DHA-S, cortisol) in maternal and fetal blood during pregnancy and labor]. *Nippon Naibunpi Gakkai Zasshi* 1989 Aug 20;65(8):704-14. (Jpn).
- Szabo T, Oroszlan G, Lakatos L, Dvoracek E, Karmazsin L. Antenatal corticosteroid increases serum ceruloplasmin activity in premature neonates. *Acta Paediatr Hung* 1987;28(3-4):179-85.

- Tomazevic T, Kovacic J, Vrhovec I. Umbilical cord cortisol in breech delivery. *J Reprod Med* 1985 Jan;30(1):53-6.
- Tropper PJ, Warren WB, Jozak SM, Conwell IM, Stark RI, Goland RS. Corticotropin releasing hormone concentrations in umbilical cord blood of preterm fetuses. *J Dev Physiol* 1992 Aug;18(2):81-5.
- Welshons WV, Lieberman ME, Gorski J. Nuclear localization of unoccupied oestrogen receptors. *Nature* 1984 Feb 23-29;307(5953):747-9.
- Westphal U. Steroid-protein interactions II. *Monogr Endocrinol* 1986;27:1-603.
- Whitt GG, Buster JE, Killam AP, Scragg WH. A comparison of two glucocorticoid regimens for acceleration of fetal lung maturation in premature labor. *Am J Obstet Gynecol* 1976 Mar 1;124(5):479-82.
- Wittekind CA, Arnold JD, Leslie GI, Luttrell B, Jones MP. Longitudinal study of plasma acth and cortisol in very low birth weight infants in the first 8 weeks of life. *Early Hum Dev* 1993;33(3):191-200.
- Zheng SH. [Cortisol levels in maternal and cord blood and amniotic fluid in late pregnancy and labor]. *Chung Hua Fu Chan Ko Tsa Chih* 1986 Mar;21(2):72-5, 125. (Chi).
- Zovak Z, Varga SI, Kovacs L, Pal A, Pataki L, Matkovics B. The effects of Oradexon and Ambroxol pretreatment on the oxidative sensitivity of the red blood cells in preterm infants. *Clin Chim Acta* 1989;182(3):241-6.

Pulmonary Effects

- Alba E, Proserpio D. [Premature rupture of the membranes. Therapy and materno-neonatal prognosis. Our case series]. *Minerva Ginecol* 1987 Nov 11;39(11):727-35. (Ita).
- Amato M, Huppi P, Markus D, Herschkowitz N. Neurological function of immature babies after surfactant replacement therapy. *Neuropediatrics* 1991 Feb;22(1):43-4.
- Andrews EB, White AD, Weinberg JM, Layne R, Long WA. Antenatal steroids and neonatal outcomes in infants receiving surfactants in the Exosurf treatment IND [abstract]. *Pediatr Res* 1992;31: 241A.
- Annibale DJ, Hulsey TC, Wallin LA, Engstrom PC. Clinical diagnosis and management of respiratory distress in preterm neonates: effect of participation in a controlled trial. *Pediatrics* 1992 Sep;90(3):397-400.
- Arias F, Knight AB, Tomich PB. A retrospective study on the effects of steroid administration and prolongation of the latent phase in patients with preterm premature rupture of the membranes. *Am J Obstet Gynecol* 1986 May;154(5):1059-63.
- Atkinson AM, Gaudier F, Cliver SP, et al. The interaction of the maternal corticosteroids and tocolytic treatment on morbidity and mortality rates in very low birth weight infants [abstract]. *Am J Obstet Gynecol* 1994;170:386.
- Avery ME. The argument for prenatal administration of dexamethasone to prevent respiratory distress syndrome [editorial]. *J Pediatr* 1984 Feb;104(2):240.
- Avery ME, Aylward G, Creasy R, Little AB, Stripp B. Update on prenatal steroid for prevention of respiratory distress. Report of a conference--September 26-28, 1985. *Am J Obstet Gynecol* 1986 Jul;155(1):2-5.
- Avery ME, Merritt TA. Surfactant-replacement therapy [editorial]. *N Engl J Med* 1991 Mar 28;324(13):910-2. Comment on: *N Engl J Med* 1991 Mar 28;324(13):865-71. Comment in: *N Engl J Med* 1991 Oct 10;325(15):1105-6.
- Avery ME, Taeusch HW, Floros J. Surfactant replacement [editorial]. *N Engl J Med* 1986 Sep 25;315(13):825-6.
- Baillie P, Malan AF, Saunders MC, Davey DA. The active management of pre-term labour and its effects on fetal outcome. *Aust N Z J Obstet Gynaecol* 1976 May;16(2):94-9.
- Ballard PL. Combined hormonal treatment and lung maturation. *Semin Perinatol* 1984;8:23.

- Ballard PL. Glucocorticoid regulation of lung maturation. *Mead Johnson Symp Perinat Dev Med* 1987;(30):22-7.
- Ballard PL. Hormonal regulation of pulmonary surfactant. *Endocr Rev* 1989 May;10(2):165-81.
- Ballard PL. Hormones and lung maturation. *Monogr Endocrinol* 1986;28:1-354.
- Ballard PL, Ballard RA, Granberg JP, Sniderman S, Gluckman PD, Kaplan SL, Grumbach MM. Fetal sex and prenatal betamethasone therapy. *J Pediatr* 1980 Sep;97(3):451-4.
- Ballard PL, Granberg P, Ballard RA. Glucocorticoid levels in maternal and cord serum after prenatal betamethasone therapy to prevent respiratory distress syndrome. *J Clin Invest* 1975 Dec;56(6):1548-54.
- Ballard PL, Hawgood S, Liley H, Wellenstein G, Gonzales LW, Benson B, Cordell B, White RT. Regulation of pulmonary surfactant apoprotein SP 28-36 gene in fetal human lung. *Proc Natl Acad Sci U S A* 1986 Dec;83(24):9527-31.
- Ballard RA, Ballard PL, Creasy RK, Padbury J, Polk DH, Bracken M, Moya FR, Gross I. Respiratory disease in very-low-birthweight infants after prenatal thyrotropin-releasing hormone and glucocorticoid. TRH Study Group. *Lancet* 1992 Feb 29;339(8792):510-5. Comment in: *Lancet* 1992 Apr 18;339(8799):900-1; *Lancet* 1992 Jun 6; 339(8806):1417.
- Ballard RA, Ballard PL, Granberg JP, Sniderman S. Prenatal administration of betamethasone for prevention of respiratory distress syndrome. *J Pediatr* 1979 Jan;94(1):97-101.
- Barkai G, Reichman B, Lusky A, Dan U, Sack J, Goldman B, Mashiach S. The effect of thyroxine and corticosteroids upon amniotic fluid fluorescence polarization: a randomized controlled study. *J Perinat Med* 1992;20(6):459-64.
- Belkov A, Kovar R, Sladek M. [Justification for the prevention of the respiratory distress syndrome by the administration of corticoids]. *Cesk Gynekol* 1986 Mar;51(2):89-90. (Cze).
- Berclaz G, Gyr T, Bratschi HU, Markus D, Schneider H. [Induction of lung maturation in the early stage of premature rupture of fetal membranes]. *Gynakol Rundsch* 1991;31 Suppl 2:108-10. (Ger).
- Bibbo M, Gill WB, Azizi F, Blough R, Fang VS, Rosenfield RL, Schumacher GF, Sleeper K, Sonek MG, Wied GL. Follow-up study of male and female offspring of DES-exposed mothers. *Obstet Gynecol* 1977 Jan;49(1):1-8.
- Block MF, Kling OR, Crosby WM. Antenatal glucocorticoid therapy for the prevention of respiratory distress syndrome in the premature infant. *Obstet Gynecol* 1977 Aug;50(2):186-90.
- Boggaram V, Smith ME, Mendelson CR. Posttranscriptional regulation of surfactant protein-A messenger RNA in human fetal lung in vitro by glucocorticoids. *Mol Endocrinol* 1991 Mar;5(3):414-23.
- Boggaram V, Smith ME, Mendelson CR. Regulation of expression of the gene encoding the major surfactant protein (SP-A) in human fetal lung in vitro. Disparate effects of glucocorticoids on transcription and on mRNA stability. *J Biol Chem* 1989 Jul 5;264(19):11421-7.
- Boog G, Brahim MB, Gandar R. Beta-mimetic drugs and possible prevention of respiratory distress syndrome. *Br J Obstet Gynaecol* 1975 Apr;82(4):285-8.
- Brazy JE, Pupkin MJ. Effects of maternal isoxsuprine administration on preterm infants. *J Pediatr* 1979 Mar;94(3):444-8.
- Bryan H, Hawrylyshyn P, Hogg-Johnson S, Inwood S, Finley A, D'Costa M, Chipman M. Perinatal factors associated with the respiratory distress syndrome. *Am J Obstet Gynecol* 1990 Feb;162(2):476-81.
- Burkett G, Bauer CR, Morrison JC, Curet LB. Effect of prenatal dexamethasone administration on prevention of respiratory distress syndrome in twin pregnancies. *J Perinatol* 1986;6:304-8.
- Carlan SJ, Parsons M, O'Brien WF, Krammer J. Pharmacologic pulmonary maturation in preterm premature rupture of membranes [abstract]. *Am J Obstet Gynecol* 1991 Jan;164(1 Pt 2):371.
- Caspi E, Schreyer P, Weinraub Z, Reif R, Levi I, Mundel G. Prevention of the respiratory distress syndrome in premature infants by antepartum glucocorticoid therapy. *Br J Obstet Gynaecol* 1976 Mar;83(3):187-93.
- Chalmers I. Underuse of antenatal corticosteroids and future litigation [letter]. *Lancet* 1993 Mar 13; 341(8846):699. Comment on: *Lancet* 1993 Jan 16; 341(8838):174. Comment in: *Lancet* 1993 May 8; 341(8854):1218.
- Chalmers I, Hetherington J, Newdick M, Mutch L, Grant A, Enkin M, Enkin E, Dickersin K. The Oxford Database of Perinatal Trials: developing a register of published reports of controlled trials. *Controlled Clin Trials* 1986 Dec;7(4):306-24.
- Collins R, Yusuf S, Peto R. Overview of randomised trials of diuretics in pregnancy. *Br Med J (Clin Res Ed)* 1985 Jan 5;290(6461):17-23.
- Cooke R, Ryan S, Walkinshaw S. Steroids for babies [letter]. *Lancet* 1993 Feb 27;341(8844):569.

- Cosmi EV. New frontiers in prenatal prevention of respiratory distress syndrome. *J Perinat Med* 1991;19 Suppl 1:170-5.
- Cosmi EV. Prenatal prevention of respiratory distress syndrome: new pharmacologic approaches. *Early Hum Dev* 1992 Jun-Jul;29(1-3):283-6.
- Cosmi EV, Di Renzo GC. Prevention and treatment of fetal lung immaturity. *Fetal Ther* 1989;4 Suppl 1: 52-62.
- Couser RJ, Ferrara TB, Wheeler W, McNamara J, Falde B, Johnson K, Hoekstra RE. Pulmonary follow-up 2.5 years after a randomized, controlled, multiple dose bovine surfactant study of preterm newborn infants. *Pediatr Pulmonol* 1993 Mar; 15(3):163-7.
- Coustan DR. Clinical aspects of antenatal enhancement of pulmonary maturation. *Clin Perinatol* 1987 Sep;14(3):697-711.
- Creasy RK. Preterm birth prevention: where are we? *Am J Obstet Gynecol* 1993 Apr;168(4):1223-30.
- Crowley P. Corticosteroids after preterm premature rupture of membranes. *Obstet Gynecol Clin North Am* 1992 Jun;19(2):317-26.
- Crowley P. Promoting pulmonary maturity. In: Chalmers I, Enkin M, Keirse MJ, editors. *Effective care in pregnancy and childbirth*. New York: Oxford University Press; 1989. p. 746-64.
- Davis DJ. Plea for continuation of antenatal steroids at 24 to 28 weeks' gestation [letter]. *Am J Obstet Gynecol* 1993 Jan;168(1 Pt 1):280-1.
- de Oliveira RL, dos Santos MC, Candido DF, el'Debs I. [Use of glucocorticoids in prevention of the respiratory distress syndrome]. *Rev Centro Cienc Biomed Univ Fed Uberlandia* 1987 Dec;3(1):41-7. (Por).
- Depp R, Boehm JJ, Nosek JA, Dooley SL, Hobart JM. Antenatal corticosteroids to prevent neonatal respiratory distress syndrome: risk versus benefit considerations. *Am J Obstet Gynecol* 1980;137: 338-47.
- Di Renzo GC, Anceschi MM, Cosmi EV. Lung surfactant enhancement in utero. *Eur J Obstet Gynecol Reprod Biol* 1989 Jul;32(1):1-11.
- Di Renzo GC, Anceschi MM, Guidetti R, Cosmi EV. Requirements of perinatal prevention and treatment of respiratory distress syndrome. *Eur Respir J Suppl* 1989 Mar;3:68s-72s.
- Dluholucky S, Babic J, Tauffer I. Reduction of incidence and mortality of respiratory distress syndrome by administration of hydrocortisone to mother. *Arch Dis Child* 1976 Jun;51(6):420-3.
- Doran TA, Swyer P, MacMurray B, Mahon W, Enhorning G, Bernstein A, Falk M, Wood MM. Results of a double-blind controlled study on the use of betamethasone in the prevention of respiratory distress syndrome. *Am J Obstet Gynecol* 1980 Feb 1;136(3):313-20.
- Doyle LW, Kitchen WH, Ford GW, Rickards AL, Kelly EA. Antenatal steroid therapy and 5-year outcome of extremely low birth weight infants. *Obstet Gynecol* 1989 May;73(5 Pt 1):743-6.
- Doyle LW, Kitchen WH, Ford GW, Rickards AL, Lissenden JV, Ryan MM. Effects of antenatal steroid therapy on mortality and morbidity in very low birth weight infants. *J Pediatr* 1986 Feb; 108(2):287-92.
- Doyle LW, Permezel MJ, Kitchen WH. Is there a lower limit for birth-weight/gestational age and antenatal steroid therapy? *Aust N Z J Obstet Gynaecol* 1992 Aug;32(3):193-5. Comment in: *Aust N Z J Obstet Gynaecol* 1993 Feb;33(1):103-5.
- Dudenhausen JW. Alternatives to the antenatal glucocorticoid treatment for the prevention of respiratory distress syndrome. *J Perinat Med* 1987;15(5):453-9.
- Dunn MS, Shennan AT, Hoskins EM, Lennox K, Enhorning G. Two-year follow-up of infants enrolled in a randomized trial of surfactant replacement therapy for prevention of neonatal respiratory distress syndrome. *Pediatrics* 1988 Oct;82(4):543-7.
- Early versus delayed neonatal administration of a synthetic surfactant--the judgment of OSIRIS. The OSIRIS Collaborative Group (open study of infants at high risk of or with respiratory insufficiency--the role of surfactant). *Lancet* 1992 Dec 5;340(8832): 1363-9. Comment in: *Lancet* 1992 Dec 5; 340(8832):1387; *Lancet* 1993 Jan 16;341(8838): 172; discussion 173-4; *Lancet* 1993 Jan 16; 341(8838):172-3; discussion 173-4; *Lancet* 1993 Jan 16;341(8838):174.
- Effect of antenatal dexamethasone administration on the prevention of respiratory distress syndrome. *Am J Obstet Gynecol* 1981 Oct 1;141(3):276-87.
- Effects of antenatal dexamethasone administration in the infant: long-term follow-up. *J Pediatr* 1984 Feb; 104(2):259-67.
- Egberts J. Estimated costs of different treatments of the respiratory distress syndrome in a large cohort of preterm infants of less than 30 weeks of gestation. *Biol Neonate* 1992;61 Suppl 1:59-65.
- Eidelman AI. Economic consequences of surfactant therapy. *J Perinatol* 1993 Mar-Apr;13(2):137-9.

- Farrag OA. Prospective study of 3 metabolic regimens in pregnant diabetics. *Aust N Z J Obstet Gynaecol* 1987 Feb;27(1):6-9.
- Farrell EE, Silver RK, Kimberlin LV, Wolf ES, Dusik JM. Impact of antenatal dexamethasone administration on respiratory distress syndrome in surfactant-treated infants. *Am J Obstet Gynecol* 1989 Sep;161(3):628-33.
- Farrell PM, Engle MJ, Zachman RD, Curet LB, Morrison JC, Rao AV, Poole WK. Amniotic fluid phospholipids after maternal administration of dexamethasone. *Am J Obstet Gynecol* 1983 Feb 15;145(4):484-90.
- Ferrari S, Zacche G, Zanini F, Rosignoli R, Corgnati A, Rossi L, Gaioni L. [Controlled study on the prevention of respiratory distress syndrome with betamethasone in pregnancy and ACTH and cortisol levels in the premature newborn infant]. *Pediatr Med Chir* 1985 Mar-Apr;7(2):279-82. (Ita).
- Few BJ. Corticosteroids and respiratory distress syndrome. *MCN Am J Matern Child Nurs* 1988 Jan-Feb;13(1):17.
- Franklin RC, Purdie GL, O'Grady CM. Neonatal thyroid function: prematurity, prenatal steroids, and respiratory distress syndrome. *Arch Dis Child* 1986 Jun;61(6):589-92.
- Gadzinowski J, Halliday H, Szymankiewicz M, Breborowicz G, Sackey S, Sobczak E. [Evaluation of surfactant administration in neonates with respiratory distress syndrome. III. The role of intra-uterine stimulation on lung maturity]. *Ginekol Pol* 1993 Feb;64(2):74-7. (Pol).
- Gamsu HR, Mullinger BM, Donnai P, Dash CH. Antenatal administration of betamethasone to prevent respiratory distress syndrome in preterm infants: report of a UK multicentre trial. *Br J Obstet Gynaecol* 1989 Apr;96(4):401-10.
- Garite TJ, Freeman RK, Linzey EM, et al. Prospective randomized study of corticosteroids in the management of premature rupture of the membranes and the premature gestation. *Am J Obstet Gynecol* 1981;141:508-15.
- Garite TJ, Rumney PJ, Briggs GG, Harding JA, Nageotte MP, Towers CV, Freeman RK. A randomized, placebo-controlled trial of betamethasone for the prevention of respiratory distress syndrome at 24 to 28 weeks' gestation. *Am J Obstet Gynecol* 1992 Feb;166(2):646-51.
- Georgieff MK, Mammel MC, Mills MM, Gunter EW, Johnson DE, Thompson TR. Effect of postnatal steroid administration on serum vitamin A concentrations in newborn infants with respiratory compromise. *J Pediatr* 1989 Feb;114(2):301-4.
- Gerber A. [Prevention of hyaline membrane disease]. *Monatsschr Kinderheilkd* 1986 Sep;134(9):662-5. (Ger).
- Gerdes JS, Harris MC, Polin RA. Effects of dexamethasone and indomethacin on elastase, alpha 1-proteinase inhibitor, and fibronectin in bronchoalveolar lavage fluid from neonates. *J Pediatr* 1988 Oct;113(4):727-31.
- Gerner R. [Prevention of pediatric respiratory distress syndrome with special reference to glucocorticoids]. *Med Klin* 1990 Mar 15;85(3):151-5. (Ger).
- Gerner R. Sympathomimetic drugs and lung surfactant factor [letter]. *J Perinat Med* 1985;13(6):317-8.
- Gonzales LW, Ballard PL, Ertsey R, Williams MC. Glucocorticoids and thyroid hormones stimulate biochemical and morphological differentiation of human fetal lung in organ culture. *J Clin Endocrinol Metab* 1986 Apr;62(4):678-91.
- Gore SM. OSIRIS trial [letter]. *Lancet* 1993 Jan 16; 341(8838):172; discussion 173-4. Comment on: *Lancet* 1992 Dec 5;340(8832):1363-9.
- Gortner L. Natural surfactant for neonatal respiratory distress syndrome in very premature infants: a 1992 update. *J Perinat Med* 1992;20(6):409-19.
- Guerrini P, Vesce F, Colla F, Travagli S, Cocilovo G. Contribution to the assessment of steroid therapy in the prevention of respiratory distress syndrome in the neonate. *Clin Exp Obstet Gynecol* 1990; 17(3-4):145-9.
- Gunston KD, Davey DA. Effects of prenatal fenoterol, phenobarbitone and dexamethasone administration on the total phospholipid content of amniotic fluid. *S Afr Med J* 1978 Dec 30;54(27): 1141-3.
- Hack M, Horbar JD, Malloy MH, Tyson JE, Wright E, Wright L. Very low birth weight outcomes of the National Institute of Child Health and Human Development Neonatal Network. *Pediatrics* 1991 May;87(5):587-97. Comment in: *Pediatrics* 1992 Feb;89(2):357; discussion 357-8.
- Halliday HL, Tarnow-Mordi WO, Corcoran JD, Patterson CC. Multicentre randomised trial comparing high and low dose surfactant regimens for the treatment of respiratory distress syndrome (the Curosurf 4 trial). *Arch Dis Child* 1993 Sep; 69(3 Spec No):276-80.
- Haram K, Reigstad H, Markestad T. [Prenatal prevention of respiratory distress syndrome in newborn infants]. *Tidsskr Nor Laegeforen* 1993 May 30;113(14):1698-700. (Nor).
- Hays PM, Smeltzer JS. Multiple gestation. *Clin Obstet Gynecol* 1986 Jun;29(2):264-85.

- Heytmanek G, Salzer H, Vityska-Binstorfer E, Genger H, Metka M, Pfersmann R, Wolff F, Weidinger H. [Ambroxol versus betamethasone for the promotion of antepartum lung maturity in pathological pregnancies]. *Wien Klin Wochenschr* 1990 Aug 3; 102(15):443-8. (Ger).
- Ho E. Prenatal corticosteroid in preventing respiratory distress syndrome. *Midwifery* 1988 Mar;4(1):24-8.
- Hope P. Exogenous surfactants [editorial]. *BMJ* 1991 Oct 5;303(6806):799-800.
- Horbar JD, Soll RF, Sutherland JM, Kotagal U, Philip AG, Kessler DL, Little GA, Edwards WH, Vidyasagar D, Raju TN, et al. A multicenter randomized, placebo-controlled trial of surfactant therapy for respiratory distress syndrome. *N Engl J Med* 1989 Apr 13;320(15):959-65. Comment in: *N Engl J Med* 1989 Sep 21;321(12):834.
- Horbar JD, Wright EC, Onstad L. Decreasing mortality associated with the introduction of surfactant therapy: an observational study of neonates weighing 601 to 1300 grams at birth. The Members of the National Institute of Child Health and Human Development Neonatal Research Network. *Pediatrics* 1993 Aug;92(2):191-6.
- Howie RN, Liggins GC. Clinical trial of antepartum betamethasone therapy for prevention of respiratory distress in pre-term infants. In: Anderson AB, et al., editors. *Pre-term labour. Proceedings of the 5th Study Group of the Royal College of Obstetricians and Gynaecologists; 1977 Oct 5-6. London: Royal College of Obstetricians and Gynaecologists; 1977. p. 281-9.*
- Howie RN, Liggins GC. The New Zealand study of antepartum glucocorticoid treatment. In: Farrell PM, editor. *Lung development: biological, and clinical perspectives. New York: Academic Press; 1982. p. 255-65.*
- Howie RN, Liggins GC. Prevention of respiratory distress syndrome in premature infants by antepartum glucocorticoid treatment. In: Villee CA, Villee DB, Zuckerman J, editors. *Respiratory distress syndrome. New York: Academic Press; 1973. p. 369-80.*
- Hutson JM, Driscoll JM, Fox HE, Driscoll YT, Steir ME. The effect of obstetric management on neonatal mortality and morbidity for infants weighing 700-1000 grams. *Am J Perinatol* 1986 Jul;3(3):255-61.
- Improvement of outcome for infants of birth weight under 1000 g. The Victorian Infant Collaborative Study Group. *Arch Dis Child* 1991 Jul;66(7 Spec No):765-9.
- Jobe AH. Lung maturational agents and surfactant treatments: are they complementary in preterm infants? *J Perinatol* 1989 Mar;9(1):14-8.
- Jobe AH. Pulmonary surfactant therapy. *N Engl J Med* 1993 Mar 25;328(12):861-8.
- Jobe AH. Surfactant in the perinatal period. *Early Hum Dev* 1992 Jun-Jul;29(1-3):57-62.
- Jobe AH, Mitchell BR, Gunkel JH. Beneficial effects of the combined use of prenatal corticosteroids and postnatal surfactant on preterm infants. *Am J Obstet Gynecol* 1993 Feb;168(2):508-13.
- Johnson DE, Munson DP, Thompson TR. Effect of antenatal administration of dexamethasone on hospital cost and survival of premature infants. *Pediatrics* 1981;68:633-7.
- Kari MA, Hallman M, Eronon M, Teramo K, Virtanen M, Koivisto N, Ikonen RS. Prenatal dexamethasone treatment in conjunction with rescue therapy of human surfactant - a randomized placebo-controlled multicenter study. *Pediatrics*. Forthcoming 1994.
- Kari MA, Hallman M, Eronen M, Teramo K, Virtanen M, Koivisto M, Ikonen RS. Prenatal steroid in conjunction with human surfactant therapy: a randomized multicenter study [abstract]. *Pediatr Res* 1993;33:217A.
- Kattner E, Metze B, Waiss E, Obladen M. Accelerated lung maturation following maternal steroid treatment in infants born before 30 weeks gestation. *J Perinat Med* 1992;20(6):449-57.
- Kattwinkel J, Bloom BT, Delmore P, Davis CL, Farrell E, Friss H, Jung AL, King K, Mueller D. Prophylactic administration of calf lung surfactant extract is more effective than early treatment of respiratory distress syndrome in neonates of 29 through 32 weeks' gestation. *Pediatrics* 1993 Jul; 92(1):90-8. Comment in: *Pediatrics* 1993 Jul;92(1): 148-50.
- Keirse MJ. Obstetrical attitudes to glucocorticoid treatment for fetal lung maturation: time for a change? *Eur J Obstet Gynecol Reprod Biol* 1984 Jun;17(4):247-55.
- Kerepesi T, Aranyi P. Low levels of glucocorticoid binding sites in circulating lymphocytes of premature infants suffering from hyaline membrane disease. *J Steroid Biochem* 1985 Feb;22(2):151-4.
- Khanna R, Richmond S. OSIRIS trial. Northern Neonatal Nursing Initiative [letter]. *Lancet* 1993 Jan 16;341(8838):174. Comment on: *Lancet* 1992 Dec 5;340(8832):1363-9. Comment in: *Lancet* 1993 Mar 13;341(8846):699.
- Kieffer M, Weismann K, Hjorth N. [Pregnancy and treatment with glucocorticoids]. *Ugeskr Laeger* 1986 Jul 28;148(31):1960-2. (Dan).
- Kleinschmidt R, Schroder M, Preibsch W, Mattheus R, Hofmann D. [Induction of lung maturation in pending premature delivery and scheduled premature

- delivery]. *Zentralbl Gynakol* 1977; 99(3):147-54. (Ger).
- Konishi M, Chida S, Shimada S, Kasai T, Murakami Y, Cho K, Fujii Y, Maeta H, Fujiwara T. Surfactant replacement therapy in premature babies with respiratory distress syndrome: factors affecting the response to surfactant and comparison of outcome from 1982-86 and 1987-91. *Acta Paediatr Jpn* 1992 Dec;34(6):617-30.
- Kuhn RJ, Speirs AL, Pepperell RJ, Eggers TR, Doyle LW, Hutchison A. Betamethasone, albuterol, and threatened premature delivery: benefits and risks. Study of 469 pregnancies. *Obstet Gynecol* 1982 Oct;60(4):403-8.
- Kunkelmann H, Kleinbauer D, Klink F, Oberheuser F. Effects of intralipid and hydrocortisone upon human fetal lung cell cultures. *Res Exp Med (Berl)* 1988; 188(6):411-23.
- Kwong MS, Egan EA. Reduced incidence of hyaline membrane disease in extremely premature infants following delay of delivery in mother with preterm labor: use of ritodrine and betamethasone. *Pediatrics* 1986 Nov;78(5):767-74.
- Leigh J, Garite TJ. Amniocentesis and the management of premature labor. *Obstet Gynecol* 1986 Apr;67(4):500-6.
- Leviton A, Kuban KC, Pagano M, Allred EN, Van Marter L. Antenatal corticosteroids appear to reduce the risk of postnatal germinal matrix hemorrhage in intubated low birth weight newborns. *Pediatrics* 1993 Jun;91(6):1083-8.
- Liechty EA, Donovan E, Purohit D, Gilhooly J, Feldman B, Noguchi A, Denson SE, Sehgal SS, Gross I, Stevens D, et al. Reduction of neonatal mortality after multiple doses of bovine surfactant in low birth weight neonates with respiratory distress syndrome. *Pediatrics* 1991 Jul;88(1):19-28.
- Liggins GC. Can the benefits of antepartum corticosteroid treatment be improved? *Eur J Obstet Gynecol Reprod Biol* 1989 Oct;33(1):25-30.
- Liggins GC. Obstetric and paediatric collaboration to reduce morbidity after preterm birth. *Br J Obstet Gynaecol* 1990 Jan;97(1):1-3. Comment on: *Br J Obstet Gynaecol* 1990 Jan;97(1):11-25.
- Liggins GC. Prenatal glucocorticoid treatment: prevention of respiratory distress syndrome. In: Lung maturation and the prevention of hyaline membrane disease. Report of the 70th Ross Conference on Pediatric Research; 1975. Columbus (OH): Ross Laboratories; 1976. p. 97-103.
- Liggins GC, Howie RN. A controlled trial of antepartum glucocorticoid treatment for prevention of the respiratory distress syndrome in premature infants. *Pediatrics* 1972;50:515.
- Liggins GC, Howie RN. The prevention of RDS by maternal steroid therapy. In: Gluck L, editor. *Modern perinatal medicine*. Chicago: Year Book Medical Publishers; [1974]. p. 415-24.
- Liggins GC, Howie RN. Prevention of respiratory distress syndrome by antepartum corticosteroid therapy. In: Foetal and neonatal physiology. Proceedings of the Sir Joseph Barcroft Centenary Symposium; 1972; Cambridge, England. Cambridge: University Press; 1973. p. 613-7.
- Liley HG, Hawgood S, Wellenstein GA, Benson B, White RT, Ballard PL. Surfactant protein of molecular weight 28,000-36,000 in cultured human fetal lung: cellular localization and effect of dexamethasone. *Mol Endocrinol* 1987 Mar;1(3): 205-15.
- Liley HG, White RT, Benson BJ, Ballard PL. Glucocorticoids both stimulate and inhibit production of pulmonary surfactant protein A in fetal human lung. *Proc Natl Acad Sci U S A* 1988 Dec;85(23):9096-100.
- Liley HG, White RT, Warr RG, Benson BJ, Hawgood S, Ballard PL. Regulation of messenger RNAs for the hydrophobic surfactant proteins in human lung. *J Clin Invest* 1989 Apr;83(4):1191-7.
- Liu DL, Zhou ZL. Enhancement of fetal lung maturity by intra-amniotic instillation of dexamethasone--a report of 50 cases. *Chin Med J (Engl)* 1985 Dec;98(12):915-8.
- Lohninger A, Krieglsteiner HP, Salzer H, Erhardt E, Kaiser E. Role of L carnitine in perinatal metabolism and effects of L carnitine administration on dipalmitoyl phosphatidylcholine content in fetal rat lungs and human amniotic fluid. In: Kaiser E, Lohninger A, editors. *Carnitine: its role in lung and heart disorders*. Satellite symposium, Central European Congress for Anesthesiology; 1985 Sep 13; Graz, Austria. New York: S. Karger; 1987. p. 66-99.
- Long W, Corbet A, Cotton R, Courtney S, McGuinness G, Walter D, Watts J, Smyth J, Bard H, Chernick V. A controlled trial of synthetic surfactant in infants weighing 1250 g or more with respiratory distress syndrome. The American Exosurf Neonatal Study Group I, and the Canadian Exosurf Neonatal Study Group. *N Engl J Med* 1991 Dec 12;325(24): 1696-703.
- Long W, Thompson T, Sundell H, Schumacher R, Volberg F, Guthrie R. Effects of two rescue doses of a synthetic surfactant on mortality rate and survival without bronchopulmonary dysplasia in 700- to 1350-gram infants with respiratory distress syndrome. The American Exosurf Neonatal Study Group I. *J Pediatr* 1991 Apr;118(4 Pt 1):595-605.

- Lorenz U. [Experimental and clinical results of fetal lung maturity treatment]. *Arch Gynecol Obstet* 1989;245(1-4):70-5. (Ger).
- Lorenz U, Jurgens S, Ragosch V, Kipper-Kreissl B, Weitzel H. [Medical prevention of respiratory distress syndrome]. *Gynakologe* 1991 Aug;24(4):223-7. (Ger).
- Luerti M, Lazzarin A, Corbella E, Zavattini G. An alternative to steroids for prevention of respiratory distress syndrome (RDS): multicenter controlled study to compare ambroxol and betamethasone. *J Perinat Med* 1987;15(3):227-38.
- MacArthur B, Howie RN, DeZoete A, Elkins J, Liang AY. Long-term follow-up of children exposed to betamethasone in utero. In: Tejani N, editor. *Obstetrical events and developmental sequelae*. Boca Raton (FL): CRC Press; 1990. p. 81-9.
- MacArthur BA, Howie RN, Dezoete JA, Elkins J. Cognitive and psychosocial development of 4-year-old children whose mothers were treated antenatally with betamethasone. *Pediatrics* 1981 Nov;68(5):638-43.
- MacArthur BA, Howie RN, Dezoete JA, Elkins J. School progress and cognitive development of 6-year-old children whose mothers were treated antenatally with betamethasone. *Pediatrics* 1982 Jul;70(1):99-105.
- Magann EF, Graves GR, Roberts WE, Blake PG, Morrison JC, Martin JN Jr. Corticosteroids for enhanced fetal lung maturation in patients with HELLP syndrome: impact on neonates. *Aust N Z J Obstet Gynaecol* 1993 May;33(2):131-5.
- Maher J, Goldenberg R, Cliver S, Davis R, Copper R. Corticosteroid efficacy in very premature infants [abstract]. *Am J Obstet Gynecol* 1993;168(1 Pt 2):374.
- Maher J, Goldenberg RL. Outcomes of very-low-birth-weight infants after maternal corticosteroid therapy before 28 weeks' gestation [letter]. *Am J Obstet Gynecol* 1993 Nov;169(5):1363-4.
- Maniscalco WM, Kendig JW, Shapiro DL. Surfactant replacement therapy: impact on hospital charges for premature infants with respiratory distress syndrome. *Pediatrics* 1989 Jan;83(1):1-6.
- Marshall CL, Hayashi RH. Obstetric management of the very low birth weight fetus. *Clin Perinatol* 1986 Jun;13(2):251-65.
- Mead PB, Clapp JF 3d. The use of betamethasone and timed delivery in management of premature rupture of the membranes in the preterm pregnancy. *J Reprod Med* 1977 Jul;19(1):3-7.
- Melkova J, Pokorny A, Broscheova M, Srp B, Hajek Z. [Prenatal steroid therapy and the respiratory distress in premature infants]. *Cesk Gynecol* 1986 Sep;51(8):592-600. (Cze).
- Melkova J, Pokorny A, Broscheova M, Srp B, Hajek Z. [The effect of glucocorticoids and other prenatal factors on fetal lung maturity]. *Cesk Pediatr* 1986 Nov;41(11):658-63. (Cze).
- Mendelson CR, Acarregui MJ, Odom MJ, Boggaram V. Developmental and hormonal regulation of surfactant protein A (SP-A) gene expression in fetal lung. *J Dev Physiol* 1991 Jan;15(1):61-9.
- Mendelson CR, Snyder JM. Role of prolactin, cortisol, and insulin in the regulation of surfactant synthesis by the human fetal lung. *Pediatr Pulmonol* 1985 May-Jun;1(3 Suppl):S91-8.
- Merritt TA, Hallman M, Vaucher Y, McFeeley E, Tubman TR. Impact of surfactant treatment on cost of neonatal intensive care: a cost-benefit analysis. *J Perinatol* 1990 Dec;10(4):416-9.
- Morales WJ, Angel JL, O'Brien WF, Knuppel RA. Use of ampicillin and corticosteroids in premature rupture of membranes: a randomized study. *Obstet Gynecol* 1989 May;73(5 Pt 1):721-6.
- Morales WJ, Diebel ND, Lazar AJ, Zadrozny D. The effect of antenatal dexamethasone administration on the prevention of respiratory distress syndrome in preterm gestations with premature rupture of membranes. *Am J Obstet Gynecol* 1986 Mar;154(3):591-5.
- Morales WJ, O'Brien WF, Angel JL, Knuppel RA, Sawai S. Fetal lung maturation: the combined use of corticosteroids and thyrotropin-releasing hormone. *Obstet Gynecol* 1989 Jan;73(1):111-6.
- Morales WJ, Talley T. Premature rupture of membranes at < 25 weeks: a management dilemma. *Am J Obstet Gynecol* 1993 Feb; 168(2):503-7.
- Morley CJ, Morley R. Follow up of premature babies treated with artificial surfactant (ALEC). *Arch Dis Child* 1990 Jul;65(7 Spec No):667-9.
- Morrison JC, Schneider JM, Whybrew WD, Bucovaz ET. Effect of corticosteroids and fetomaternal disorders on the L:S ratio. *Obstet Gynecol* 1980 Nov;56(5):583-90.
- Morrison JC, Whybrew WD, Bucovaz ET, Schneider JM. Injection of corticosteroids into mother to prevent neonatal respiratory distress syndrome. *Am J Obstet Gynecol* 1978 Jun 15;131(4):358-66.
- Moya FR, Gross I. Prevention of respiratory distress syndrome. *Semin Perinatol* 1988 Oct;12(4):348-58.
- Mugford M, Piercy J, Chalmers I. Cost implications of different approaches to the prevention of respiratory distress syndrome. *Arch Dis Child* 1991 Jul;66(7 Spec No):757-64.

- Nabijan AA. Antepartum glucocorticoids in preterm labor: a review. *Singapore J Obstet Gynaecol* 1990;21(3):147-52.
- Nagel H, Doring R. [Surfactant synthesis and lung maturity]. *Zentralbl Gynakol* 1985;107(20):1219-25. (Ger).
- Nwosu U. Management of premature rupture of membranes [abstract]. *Am J Obstet Gynecol* 1992;166(1 Pt 2):425.
- Obladen M, Maier RF. Respiratory disorders of the neonate. *Curr Opin Pediatr* 1993 Apr;5(2):156-61.
- Odom MJ, Snyder JM, Boggaram V, Mendelson CR. Glucocorticoid regulation of the major surfactant associated protein (SP-A) and its messenger ribonucleic acid and of morphological development of human fetal lung in vitro. *Endocrinology* 1988 Oct;123(4):1712-20.
- Papageorgiou A, Stern L. Antenatal prevention of the neonatal respiratory distress syndrome: benefits and potential risks for the mother and the infant. *J Perinat Med* 1986;14(2):75-86.
- Papageorgiou AN, Colle E, Farri-Kostopoulos E, Gelfand MM. Incidence of respiratory distress syndrome following antenatal betamethasone: role of sex, type of delivery, and prolonged rupture of membranes. *Pediatrics* 1981 May;67(5):614-7.
- Papageorgiou AN, Desgranges MF, Masson M, Colle E, Shatz R, Gelfand MM. The antenatal use of betamethasone in the prevention of respiratory distress syndrome: a controlled double-blind study. *Pediatrics* 1979 Jan;63(1):73-9.
- Papageorgiou AN, Doray J-L, Ardilis R, Kunos I. Reduction of mortality, morbidity and respiratory distress syndrome in infants weighing less than 1,000 grams by treatment with betamethasone and ritodrine. *Pediatrics* 1989;83:493-7.
- Parsons MT, Sobel D, Cumiskey K, Constantine L, Roitman J. Steroid, antibiotic and tocolytic versus no steroid, antibiotic and tocolytic management in patients with preterm rupture PROM at 25-32 weeks. Paper presented at: 8th Annual Meeting of the Society of Perinatal Obstetricians; 1988 Feb 4-6; Las Vegas, Nevada.
- Phibbs RH, Ballard RA, Clements JA, Heilbron DC, Phibbs CS, Schlueter MA, Sniderman SH, Tooley WH, Wakeley A. Initial clinical trial of EXOSURF, a protein-free synthetic surfactant, for the prophylaxis and early treatment of hyaline membrane disease. *Pediatrics* 1991 Jul;88(1):1-9.
- Phuapradit W, Pongthai S, Chaturachinda K. A five-year experience with terbutaline for preterm labor. *J Med Assoc Thai* 1986;69(4):224-8.
- Piganova NL, Nyrkova VI. [Antenatal use of steroids in the prevention of respiratory distress syndrome in newborn infants]. *Akush Ginekol (Mosk)* 1989 Jun;(6):9-12. (Rus).
- Pramanik AK, Holtzman RB, Merritt TA. Surfactant replacement therapy for pulmonary diseases. *Pediatr Clin North Am* 1993 Oct;40(5):913-36.
- RDS prevention: benefit and risk [letter]. *J Perinat Med* 1986;14(4):275-6.
- Roberts WE, Morrison JC. Pharmacologic induction of fetal lung maturity. *Clin Obstet Gynecol* 1991 Jun;34(2):319-27.
- Robertson B. Corticosteroids and surfactant for prevention of neonatal RDS. *Ann Med* 1993 Jun;25(3):285-8.
- Robertson B, Curstedt T, Tubman R, Strayer D, Berggren P, Kok J, Koppe J, van Sonderen L, Halliday H, McClure G, et al. A 2-year follow up of babies enrolled in a European multicentre trial of porcine surfactant replacement for severe neonatal respiratory distress syndrome. Collaborative European Multicentre Study Group. *Eur J Pediatr* 1992 May;151(5):372-6.
- Robertson B, Speer CP. OSIRIS trial [letter]. *Lancet* 1993 Jan 16;341(8838):172; discussion 173-4. Comment on: *Lancet* 1992 Dec 5;340(8832):1363-9.
- Rosenberg AA. Neonatal and infant problems of low birth weight. *Curr Opin Obstet Gynecol* 1991 Feb;3(1):8-14.
- Salzer H. [Premature rupture of the fetal membranes and fetal lung maturity]. *Gynakol Rundsch* 1989;29 Suppl 2:132-6. (Ger).
- Salzer H, Lohninger A, Sevelde P, Legenstein E. [Stimulation of fetal lung maturation with carnitine]. *Gynaekol Rundsch* 1985;25(2):72-85. (Ger).
- Salzer H, Weidinger H, Simbruner G, Vytiska-Binstorfer E. [Ambroxol versus betamethasone for stimulating antepartal lung maturity--a multicenter study]. *Z Geburtshilfe Perinatol* 1986 Feb-Mar;190(1):49-59. (Ger).
- Schellenberg JC, Liggins GC. New approaches to hormonal acceleration of fetal lung maturation. *J Perinat Med* 1987;15(5):447-52.
- Schmand B, Neuvel J, Smolders-de Haas H, Hoeks J, Treffers PE, Koppe JG. Psychological development of children who were treated antenatally with corticosteroids to prevent respiratory distress syndrome. *Pediatrics* 1990 Jul; 86(1):58-64.
- Schmidt PL, Sims ME, Strassner HT, Paul RH, Mueller E, McCart D. Effect of antepartum glucocorticoid administration upon neonatal respiratory distress

- syndrome and perinatal infection. *Am J Obstet Gynecol* 1984 Jan 15; 148(2):178-86.
- Schrod L, Albert P, Frauendienst-Egger G, von Stockhausen HB. [Antepartum prevention and postnatal therapy of respiratory distress syndrome]. *Z Geburtshilfe Perinatol* 1993 Jul-Aug;197(4): 184-7. (Ger).
- Schutte MF. [The unborn child as patient; recommendations by the Public Health Council (letter)]. *Ned Tijdschr Geneesk* 1990 Dec 15; 134(50):2453-4. (Dut).
- Schutte MF, Treffers PE, Koppe JG, Breur W. The influence of betamethasone and orciprenaline on the incidence of respiratory distress syndrome in the newborn after preterm labour. *Br J Obstet Gynaecol* 1980 Feb;87(2):127-31.
- Schutte MF, Treffers PE, Koppe JG, Breur W, Filedt Kok JC. [Clinical application of corticosteroids for acceleration of fetal lung maturity]. *Ned Tijdschr Geneesk* 1979 Mar 17;123(11):420-7. (Dut).
- Silver RK, MacGregor SN, Farrell EE, Sholl JS, Hobart ED. Antenatal steroid therapy before 33 weeks' gestation. *Int J Gynaecol Obstet* 1993 Apr; 41(1):23-6.
- Silverman M. Long-term lung function is unaffected by antenatal dexamethasone treatment [letter]. *Pediatr Pulmonol* 1989;6(3):210-1. Comment on: *Pediatr Pulmonol* 1988;5(1):27-30.
- Simmons SC (President, Royal College of Obstetricians and Gynaecologists, London). Letter to: Members of the Royal College. 1993 Feb. This letter discusses the recommendation of the Royal College's Scientific Advisory Committee regarding the administration of antenatal corticosteroids to reduce the incidence of neonatal respiratory distress syndrome.
- Simpson GF, Harbert GM Jr. Use of beta-methasone in management of preterm gestation with premature rupture of membranes. *Obstet Gynecol* 1985 Aug; 66(2):168-75.
- Sinkin RA, Phelps DL. New strategies for the prevention of bronchopulmonary dysplasia. *Clin Perinatol* 1987 Sep;14(3):599-620.
- Smith BT, Floros J, Post M. Hormonal/intercellular control of lung maturation. *Prog Clin Biol Res* 1986;226:141-6.
- Spinnato JA. Infrequency of pulmonary immaturity in an indigent population with preterm premature rupture of the membranes. *Obstet Gynecol* 1987; 69(6):942-4.
- Stark AR, Frantz ID 3d. Respiratory distress syndrome. *Pediatr Clin North Am* 1986 Jun;33(3): 533-44.
- Strittmatter HJ, Wischnik A, Lasch P, Friese K, Melchert F, Kachel W. [Fetal outcome of premature infants less than 1,500 g birth weight with special reference to surfactant requirements]. *Geburtshilfe Frauenheilkd* 1992 Sep;52(9):544-8. (Ger).
- Suidan JS, Baassiri G. Respiratory distress syndrome: differential effects of prenatal steroid therapy and prolonged rupture of the membranes. *Int J Gynaecol Obstet* 1990 Jul;32(3):237-42.
- Szabo I, Csaba I, Novak P, Drozgyik I. Single-dose glucocorticoid for prevention of respiratory-distress syndrome [letter]. *Lancet* 1977 Jul 30;2(8031):243.
- Szczurowicz A, Witczak A, Rumistrzewicz E. [Effect of glucocorticoids, tocolytics and oxytocin on the status and fate of premature infants]. *Wiad Lek* 1988 Sep 15;41(18):1197-203. (Pol).
- Tabor BL, Rider ED, Ikegami M, Jobe AH, Lewis JF. Dose effects of antenatal corticosteroids for induction of lung maturation in preterm rabbits. *Am J Obstet Gynecol* 1991 Feb;164(2):675-81.
- Tausch HW, Polk D. Steroids for respiratory distress syndrome--again [editorial]. *J Pediatr* 1990 Aug;117(2 Pt 1):248-50. Comment on: *J Pediatr* 1990 Aug;117(2 Pt 1):273-82.
- Tausch HW, Smith BT. Surfactant sufficiency for immature infants--prenatal induction vs. postnatal treatment. *Eur J Respir Dis Suppl* 1987;153: 249-54.
- Tausch HW Jr. Glucocorticoid prophylaxis for respiratory distress syndrome: a review of potential toxicity. *J Pediatr* 1975;87:617-23.
- Tausch HW Jr, Frigoletto F, Kitzmiller J, Avery ME, Hehre A, Fromm B, Lawson E, Neff RK. Risk of respiratory distress syndrome after prenatal dexamethasone treatment. *Pediatrics* 1979 Jan; 63(1):64-72.
- Ten centre trial of artificial surfactant (artificial lung expanding compound) in very premature babies. Ten Centre Study Group. *Br Med J (Clin Res Ed)* 1987 Apr 18;294(6578):991-6.
- Teramo K, Hallman M, Raivio KO. Maternal glucocorticoid in unplanned premature labor. Controlled study on the effects of betamethasone phosphate on the phospholipids of the gastric aspirate and on the adrenal cortical function of the newborn infant. *Pediatr Res* 1980 Apr;14(4 Pt 1): 326-9.
- Theunissen I, van Lierde M. Preterm premature rupture of the membranes: neonatal outcome in 215 cases of an active conservative management. *J Perinat Med* 1989;17(6):423-32.

- Thornfeldt RE, Franklin RW, Pickering NA, Thornfeldt CR, Amell G. The effect of glucocorticoids on the maturation of premature lung membranes. Preventing the respiratory distress syndrome by glucocorticoids. *Am J Obstet Gynecol* 1978 May 15;131(2):143-8.
- Tubman TR, Halliday HL, Normand C. Cost of surfactant replacement treatment for severe neonatal respiratory distress syndrome: a randomised controlled trial. *BMJ* 1990 Oct 13;301(6756):842-5. Published erratum appears in *BMJ* 1991 Jan 5;302(6767):27.
- Tubman TR, Halliday HL, Normand C. Economic impact of porcine surfactant replacement (Curosurf) for severe neonatal respiratory distress syndrome. *J Perinat Med* 1991;19 Suppl 1:403-7.
- Tubman TR, Rollins MD, Patterson C, Halliday HL. Increased incidence of respiratory distress syndrome in babies of hypertensive mothers. *Arch Dis Child* 1991 Jan;66(1 Spec No):52-4.
- Van Dorsten JP, Horger EO 3d, Miller MC. Preterm rupture of the membranes: combination therapy. *Am J Obstet Gynecol* 1985 Sep 15;153(2):147-53.
- Van Marter LJ, Leviton A, Kuban KC, Pagano M, Allred EN. Maternal glucocorticoid therapy and reduced risk of bronchopulmonary dysplasia. *Pediatrics* 1990 Sep;86(3):331-6. Comment in: *Pediatrics* 1992 Mar;89(3):523-4.
- Vaucher YE, Harker L, Merritt TA, Hallman M, Gist K, Bejar R, Heldt GP, Edwards D, Pohjavuori M. Outcome at twelve months of adjusted age in very low birth weight infants with lung immaturity: a randomized, placebo-controlled trial of human surfactant. *J Pediatr* 1993 Jan;122(1):126-32.
- Vaucher YE, Merritt TA, Hallman M, Jarvenpaa AL, Telsey AM, Jones BL. Neurodevelopmental and respiratory outcome in early childhood after human surfactant treatment. *Am J Dis Child* 1988 Sep;142(9):927-30.
- Verma AH, El-Mousley Z, Ross RD. Prenatal administration of betamethasone s in very low birth weight infants vlb: risk vs benefits [abstract]. *Pediatr Res* 1993;33(4 Pt 2):254a.
- The Vermont-Oxford Trials Network: very low birth weight outcomes for 1990. Investigators of the Vermont-Oxford Trials Network Database Project. *Pediatrics* 1993 Mar;91(3):540-5.
- Vytiska-Binstorfer E, Salzer H, Simbruner G. [Ambroxol in comparison with betamethasone for the stimulation of antepartal lung maturity. A clinical double-blind study]. *Zentralbl Gynakol* 1986;108(4):220-9. (Ger).
- Ware J, Tausch HW, Soll RF, McCormick MC. Health and developmental outcomes of a surfactant controlled trial: follow-up at 2 years. *Pediatrics* 1990 Jun;85(6):1103-7. Published erratum appears in *Pediatrics* 1991 Mar;87(3):412. Comment in: *Pediatrics* 1991 Mar;87(3):412.
- Wauer RR, Schmalisch G, Hammer H, Buttenberg S, Weigel H, Huth M. Ambroxol for prevention and treatment of hyaline membrane disease. *Eur Respir J Suppl* 1989 Mar;3:57S-65S.
- Weiner SA, Weinstein L. Fetal pulmonary maturity and antenatal diagnosis of respiratory distress syndrome. *Obstet Gynecol Surv* 1987 Feb;42(2):75-81.
- Weitzel HK, Lorenz U, Kipper B. Clinical aspects of antenatal glucocorticoid treatment for prevention of neonatal respiratory distress syndrome. *J Perinat Med* 1987;15(5):441-6.
- White AD, Andrews ED, Weinberg JM, Wold DE, Long WA. The Exosurf Neonatal TIND Study Group. Factors associated with intraventricular hemorrhage (IVH) in the exosurf neonatal treatment IND (TIND) [abstract]. *Pediatr Res* 1992;31: 263A.
- Whitsett JA, Weaver TE, Clark JC, Sawtell N, Glasser SW, Korfhagen TR, Hull WM. Glucocorticoid enhances surfactant proteolipid Phe and pVal synthesis and RNA in fetal lung. *J Biol Chem* 1987 Nov 15;262(32):15618-23.
- Whitt GG, Buster JE, Killam AP, Scragg WH. A comparison of two glucocorticoid regimens for acceleration of fetal lung maturation in premature labor. *Am J Obstet Gynecol* 1976 Mar 1;124(5):479-82.
- Wiebicke W, Poynter A, Chernick V. Normal lung growth following antenatal dexamethasone treatment for respiratory distress syndrome. *Pediatr Pulmonol* 1988;5(1):27-30. Comment in: *Pediatr Pulmonol* 1989;6(3):210-1.
- Wijemanne E, de Silva K. Effect of antenatal hydrocortisone administration on the prevention of respiratory distress syndrome of the newborn. *Ceylon Med J* 1985 Sep;30(3):131-7.
- Wiswell TE, Mendiola J Jr. Respiratory distress syndrome in the newborn: innovative therapies. *Am Fam Physician* 1993 Feb 1;47(2):407-14.
- Wolff F, Bolte A. [The status of prenatal lung ripening]. *Geburtshilfe Frauenheilkd* 1990 Mar;50(3):171-6. (Ger).
- Wolff F, Ponnath H, Wiest W. [Induction of fetal lung maturation using ambroxol and betamethasone. Results of an open multicenter study]. *Geburtshilfe Frauenheilkd* 1987 Jan;47(1):19-25. (Ger).
- Young BK, Klein SA, Katz M, Wilson SJ, Douglas GW. Intravenous dexamethasone for prevention of neonatal respiratory distress: A prospective

controlled study. *Am J Obstet Gynecol* 1980
Sep 15;138(2):203-9.

Zachman RD. The NIH multicenter study and miscellaneous clinical trials of antenatal corticosteroid administration. In: Farrell PM, editor. *Lung development: biological, and clinical perspectives*. New York: Academic Press; 1982. p. 275-96.

Zajac T. [Factors affecting fetal lung maturation. Prevention of respiratory distress syndrome in premature infants]. *Wiad Lek* 1986 Jul 1;39(13): 926-32. (Pol).

Ziokowski K, Godziejewski J, Turowski J, Zaucka K. [Method of management of premature labor in twin pregnancies using glucocorticoids]. *Ginekol Pol* 1985 Apr;56(4):229-34. (Pol).

Ziokowski K, Szymanska AD, Turowski J, Zaucka K. [A method of management of premature labor using glucocorticoids]. *Ginekol Pol* 1985 May-Jun; 56(5-6):348-52. (Pol).

Zola EM, Overbach AM, Gunkel JH, Mitchell BR, Nagle BT, DeMarco NG, Henwood GA, Gold AJ. Treatment Investigational New Drug experience with Survanta (beractant). *Pediatrics* 1993 Mar;91(3):546-51.

Zovak Z, Varga SI, Kovacs L, Pal A, Pataki L, Matkovics B. The effects of Oradexon and Ambroxol pretreatment on the oxidative sensitivity of the red blood cells in preterm infants. *Clin Chim Acta* 1989;182(3):241-6.

Renal Function

al-Dahan J, Stimmler L, Chantler C, Haycock GB. The effect of antenatal dexamethasone administration on glomerular filtration rate and renal sodium excretion in premature infants. *Pediatr Nephrol* 1987 Apr;1(2):131-5.

MacKintosh D, Baird-Lambert J, Drage D, Buchanan N. Effects of prenatal glucocorticoids on renal maturation in newborn infants. *Dev Pharmacol Ther* 1985;8(2):107-14.

Zanardo V, Giacobbo F, Zambon P, Trevisanuto D, Griffith P, Grella P, Zacchello G. Antenatal aminophylline and steroid exposure effects on glomerular filtration rate and renal sodium excretion in preterm newborns. *J Perinat Med* 1990;18(4): 283-8.

MATERNAL**Adverse Effects**

- Beer P, Passweg D. [Maternal pulmonary edema as an anesthesia complication after intravenous tocolysis and stimulating of lung maturation]. *Gynakol Geburtshilfliche Rundsch* 1992;32(2):100-3. (Ger).
- Benedetti TJ. Maternal complications of parenteral beta-sympathomimetic therapy for premature labor. *Am J Obstet Gynecol* 1983 Jan 1;145(1):1-6.
- Bernstein IM, Catalano PM. Ketoacidosis in pregnancy associated with the parenteral administration of terbutaline and betamethasone. A case report. *J Reprod Med* 1990 Aug;35(8): 818-20.
- Cunningham DS, Evans EE. The effects of betamethasone on maternal cellular resistance to infection. *Am J Obstet Gynecol* 1991 Sep;165(3): 610-5.
- Curet LB, Morrison JC, Rao AV. Antenatal therapy with corticosteroids and postpartum complications. *Am J Obstet Gynecol* 1985 May 1;152(1):83-4.
- Depp R, Boehm JJ, Nosek JA, Dooley SL, Hobart JM. Antenatal corticosteroids to prevent neonatal respiratory distress syndrome: risk versus benefit considerations. *Am J Obstet Gynecol* 1980;137: 338-47.
- Dudenhause JW. Alternatives to the antenatal glucocorticoid treatment for the prevention of respiratory distress syndrome. *J Perinat Med* 1987;15(5):453-9.
- Elliott HR, Abdulla U, Hayes PJ. Pulmonary oedema associated with ritodrine infusion and betamethasone administration in premature labour. *Br Med J* 1978 Sep 16;2(6140):799-800.
- Elliott JP, O'Keeffe DF, Greenberg P, Freeman RK. Pulmonary edema associated with magnesium sulfate and betamethasone administration. *Am J Obstet Gynecol* 1979 Jul 15;134(6):717-9.
- Finley J, Katz M, Rojas-Perez M, Roberts JM, Creasy RK, Schiller NB. Cardiovascular consequences of beta-agonist tocolysis: an echocardiographic study. *Obstet Gynecol* 1984 Dec;64(6):787-91.
- Guller S, Wozniak R, Krikun G, Burnham JM, Kaplan P, Lockwood CJ. Glucocorticoid suppression of human placental fibronectin expression: implications in uterine-placental adherence. *Endocrinology* 1993 Sep;133(3):1139-46.
- Hankins GD. Complications of beta-sympathomimetic tocolytic agents. In: Clark SL, et al., editors. *Critical care obstetrics*. 2nd ed. Boston: Blackwell Scientific Publications; 1991. p. 231.
- Heytmanek G, Salzer H, Vityska-Binstorfer E, Genger H, Metka M, Pfersmann R, Wolff F, Weidinger H. [Ambroxol versus betamethasone for the promotion of antepartum lung maturity in pathological pregnancies]. *Wien Klin Wochenschr* 1990 Aug 3; 102(15):443-8. (Ger).
- Katz M, Robertson PA, Creasy RK. Cardiovascular complications associated with terbutaline treatment for preterm labor. *Am J Obstet Gynecol* 1981 Mar 1;139(5):605-8.
- Krenek M, Starka L. [Steroid hormones and glucose tolerance in pregnancy]. *Cesk Gynekol* 1989 Feb; 54(1):28-36. (Cze).
- Kuhn RJ, Speirs AL, Pepperell RJ, Eggers TR, Doyle LW, Hutchison A. Betamethasone, albuterol, and threatened premature delivery: benefits and risks. Study of 469 pregnancies. *Obstet Gynecol* 1982 Oct;60(4):403-8.
- Martell M, Oehninger C, Scotti C, Delgado L, Martinez M, Korc I. Influence of glucocorticoid and betamimetic therapy on milk secretory IgA concentration produced by mothers delivering preterm infants. *J Perinat Med* 1985;13(2):61-5.
- Morrison JC, Whybrew WD, Bucovaz ET, Schneider JM. Injection of corticosteroids into mother to prevent neonatal respiratory distress syndrome. *Am J Obstet Gynecol* 1978 Jun 15;131(4):358-66.
- Ohlsson A, Heyman E. Dexamethasone-induced bradycardia [letter]. *Lancet* 1988 Nov 5;2(8619): 1074.
- Philipsen T, Eriksen PS, Lynggard F. Pulmonary edema following ritodrine-saline infusion in premature labor. *Obstet Gynecol* 1981 Sep; 58(3):304-8.
- Prober CG. The risk of dexamethasone in pregnant women with a history of recurrent genital herpes. *Pediatr Infect Dis J* 1991 Jan;10(1):82-3.
- Puntis JW, Morgan ME, Durbin GM. Dexamethasone-induced bradycardia [letter]. *Lancet* 1988 Dec 10;2(8624):1372.
- Robertson PA, Herron M, Katz M, Creasy RK. Maternal morbidity associated with isoxsuprine and terbutaline tocolysis. *Eur J Obstet Gynecol Reprod Biol* 1981 May;11(6):371-8.
- Russi EW, Spaetling L, Gmur J, Schneider H. High permeability pulmonary edema (ARDS) during tocolytic therapy--a case report. *J Perinat Med* 1988;16(1):45-9.
- Salzer H, Weidinger H, Simbruner G, Vytiska-Binstorfer E. [Ambroxol versus betamethasone for stimulating antepartal lung maturity--a multicenter study]. *Z Geburtshilfe Perinatol* 1986 Feb-Mar;190(1):49-59. (Ger).

- Schmidt PL, Sims ME, Strassner HT, Paul RH, Mueller E, McCart D. Effect of antepartum glucocorticoid administration upon neonatal respiratory distress syndrome and perinatal infection. *Am J Obstet Gynecol* 1984 Jan 15; 148(2):178-86.
- Spatling L, Staisch KJ, Huch R, Huch A. Effect of ritodrine and betamethasone on metabolism, respiration, and circulation. *Am J Perinatol* 1986 Jan;3(1):41-6.
- Stubblefield PG. Pulmonary edema occurring after therapy with dexamethasone and terbutaline for premature labor: a case report. *Am J Obstet Gynecol* 1978 Oct 1;132(3):341-2.
- Wolff F, Carstens V, Fischer JH, Behrenbeck D, Bolte A. Cardiopulmonary effects of betamimetic tocolytic and glucocorticoid therapy in pregnant women. *Arch Gynecol* 1986;239(1):49-58.
- Yusuf S, Peto R, Lewis J, Collins R, Sleight P. Beta blockade during and after myocardial infarction: an overview of the randomized trials. *Prog Cardiovasc Dis* 1985 Mar-Apr;27(5):335-71.
- Zavadsky A, Velcevsy J. [Risks in the administration of glucocorticoids in pregnancy]. *Cesk Gynecol* 1990 Jul;55(6):439-40. (Cze).
- Zykh I, Dorachinski G, Zykh M. [Effect of preventive use of dexamethasone on various indicators of humoral immunity in mothers and newborn infants]. *Akush Ginekol (Mosk)* 1990 Jun;(6):54-5. (Rus).

Combination Therapy

- Adam K, Ou CN, Cotton DB. Combined effect of terbutaline and betamethasone on glucose homeostasis in preterm labor. *Fetal Diagn Ther* 1993;8(3):187-94.
- Arias F, Knight AB, Tomich PB. A retrospective study on the effects of steroid administration and prolongation of the latent phase in patients with preterm premature rupture of the membranes. *Am J Obstet Gynecol* 1986 May;154(5):1059-63.
- Atkinson AM, Gaudier F, Cliver SP, et al. The interaction of the maternal corticosteroids and tocolytic treatment on morbidity and mortality rates in very low birth weight infants [abstract]. *Am J Obstet Gynecol* 1994;170:386.
- Baillie P, Malan AF, Saunders MC, Davey DA. The active management of pre-term labour and its effects on fetal outcome. *Aust N Z J Obstet Gynaecol* 1976 May;16(2):94-9.
- Ballard PL. Combined hormonal treatment and lung maturation. *Semin Perinatol* 1984;8:23.
- Ballard RA, Ballard PL, Creasy RK, Padbury J, Polk DH, Bracken M, Moya FR, Gross I. Respiratory disease in very-low-birthweight infants after prenatal thyrotropin-releasing hormone and glucocorticoid. TRH Study Group. *Lancet* 1992 Feb 29;339(8792):510-5. Comment in: *Lancet* 1992 Apr 18;339(8799):990-1; *Lancet* 1992 Jun 6; 339(8806):1417.
- Barkai G, Reichman B, Lusky A, Dan U, Sack J, Goldman B, Mashiach S. The effect of thyroxine and corticosteroids upon amniotic fluid fluorescence polarization: a randomized controlled study. *J Perinat Med* 1992;20(6):459-64.
- Beer P, Passweg D. [Maternal pulmonary edema as an anesthesia complication after intravenous tocolysis and stimulating of lung maturation]. *Gynakol Geburtshilfliche Rundsch* 1992;32(2):100-3. (Ger).
- Benedetti TJ. Maternal complications of parenteral beta-sympathomimetic therapy for premature labor. *Am J Obstet Gynecol* 1983 Jan 1;145(1):1-6.
- Bernstein IM, Catalano PM. Ketoacidosis in pregnancy associated with the parenteral administration of terbutaline and betamethasone. A case report. *J Reprod Med* 1990 Aug;35(8): 818-20.
- Broide E, Bistrizter T, Livne M, Neuman M, Goldberg M, Aladjem M. The effect of prenatal administration of dexamethasone and ritodrine on cord blood cortisol and glucose concentrations in premature infants with respiratory distress syndrome. *J Perinat Med* 1992;20(4):289-95.

- Chapman MG. Salbutamol-induced acidosis in pregnant diabetics [letter]. *Br Med J* 1977 Mar 5; 1(6061):639-40.
- Cohen I, Altaras M, Jaffe R, Aderet NB. Perinatal factors influencing outcome of very-low-birth weight infants. *Isr J Med Sci* 1986;22(6):430-4.
- Cosmi EV. Prenatal prevention of respiratory distress syndrome: new pharmacologic approaches. *Early Hum Dev* 1992 Jun-Jul;29(1-3):283-6.
- Cosmi EV, Di Renzo GC. Prevention and treatment of fetal lung immaturity. *Fetal Ther* 1989;4 Suppl 1: 52-62.
- de Zegher F, de Vries L, Pierrat V, Daniels H, Spitz B, Casaer P, Devlieger H, Eggermont E. Effect of prenatal betamethasone/thyrotropin releasing hormone treatment on somatosensory evoked potentials in preterm newborns. *Pediatr Res* 1992 Aug;32(2):212-4.
- Dudenhausen JW. Alternatives to the antenatal glucocorticoid treatment for the prevention of respiratory distress syndrome. *J Perinat Med* 1987;15(5):453-9.
- Elliott HR, Abdulla U, Hayes PJ. Pulmonary oedema associated with ritodrine infusion and betamethasone administration in premature labour. *Br Med J* 1978 Sep 16;2(6140):799-800.
- Elliott JP, O'Keeffe DF, Greenberg P, Freeman RK. Pulmonary edema associated with magnesium sulfate and betamethasone administration. *Am J Obstet Gynecol* 1979 Jul 15;134(6):717-9.
- Eriksen NL, Blanco JD. The role of corticosteroids in the management of patients with preterm premature rupture of the membranes. *Clin Obstet Gynecol* 1991 Dec;34(4):694-701.
- Franklin RC, Purdie GL, O'Grady CM. Neonatal thyroid function: prematurity, prenatal steroids, and respiratory distress syndrome. *Arch Dis Child* 1986 Jun;61(6):589-92.
- Groome LJ, Goldenberg RL, Cliver SP, Davis RO, Copper RL. Neonatal periventricular-intraventricular hemorrhage after maternal beta-sympathomimetic tocolysis. The March of Dimes Multicenter Study Group. *Am J Obstet Gynecol* 1992 Oct;167(4 Pt 1):873-9.
- Gunston KD, Davey DA. Effects of prenatal fenoterol, phenobarbitone and dexamethasone administration on the total phospholipid content of amniotic fluid. *S Afr Med J* 1978 Dec 30;54(27): 1141-3.
- Hankins GD. Complications of beta-sympathomimetic tocolytic agents. In: Clark SL, et al., editors. *Critical care obstetrics*. 2nd ed. Boston: Blackwell Scientific Publications; 1991. p. 231.
- Heyborne KD, Burke MS, Porreco RP. Prolongation of premature gestation in women with hemolysis, elevated liver enzymes and low platelets. A report of five cases. *J Reprod Med* 1990 Jan;35(1):53-7.
- Kattner E, Metzke B, Waiss E, Obladen M. Accelerated lung maturation following maternal steroid treatment in infants born before 30 weeks gestation. *J Perinat Med* 1992;20(6):449-57.
- Katz M, Robertson PA, Creasy RK. Cardiovascular complications associated with terbutaline treatment for preterm labor. *Am J Obstet Gynecol* 1981 Mar 1;139(5):605-8.
- King JF, Grant A, Keirse MJ, Chalmers I. Beta-mimetics in preterm labour: an overview of the randomized controlled trials. *Br J Obstet Gynaecol* 1988 Mar;95(3):211-22.
- Kwong MS, Egan EA. Reduced incidence of hyaline membrane disease in extremely premature infants following delay of delivery in mother with preterm labor: use of ritodrine and betamethasone. *Pediatrics* 1986 Nov;78(5):767-74.
- Lamont RF. The management of preterm labour. *Clin Obstet Gynaecol* 1986 Jun;13(2):231-46.
- Liggins GC. Can the benefits of antepartum corticosteroid treatment be improved? *Eur J Obstet Gynecol Reprod Biol* 1989 Oct;33(1):25-30.
- Liggins GC. Obstetric and paediatric collaboration to reduce morbidity after preterm birth. *Br J Obstet Gynaecol* 1990 Jan;97(1):1-3. Comment on: *Br J Obstet Gynaecol* 1990 Jan;97(1):11-25.
- Miodovnik M, Peros N, Holroyde JC, Siddiqi TA. Treatment of premature labor in insulin-dependent diabetic women. *Obstet Gynecol* 1985 May;65(5): 621-7.
- Morales WJ, Angel JL, O'Brien WF, Knuppel RA. Use of ampicillin and corticosteroids in premature rupture of membranes: a randomized study. *Obstet Gynecol* 1989 May;73(5 Pt 1):721-6.
- Morales WJ, Diebel ND, Lazar AJ, Zadrozny D. The effect of antenatal dexamethasone administration on the prevention of respiratory distress syndrome in preterm gestations with premature rupture of membranes. *Am J Obstet Gynecol* 1986 Mar; 154(3):591-5.
- Morales WJ, O'Brien WF, Angel JL, Knuppel RA, Sawai S. Fetal lung maturation: the combined use of corticosteroids and thyrotropin-releasing hormone. *Obstet Gynecol* 1989 Jan;73(1):111-6.
- Morales WJ, Talley T. Premature rupture of membranes at < 25 weeks: a management dilemma. *Am J Obstet Gynecol* 1993 Feb;168(2): 503-7.

- Moya FR, Gross I. Prevention of respiratory distress syndrome. *Semin Perinatol* 1988 Oct;12(4):348-58.
- Nelson LH, Meis PJ, Hatjis CG, Ernest JM, Dillard R, Schey HM. Premature rupture of membranes: a prospective, randomized evaluation of steroids, latent phase, and expectant management. *Obstet Gynecol* 1985 Jul;66(1):55-8.
- Ogburn PL Jr, Julian TM, Williams PP, Thompson TR. The use of magnesium sulfate for tocolysis in preterm labor complicated by twin gestation and betamimetic-induced pulmonary edema. *Acta Obstet Gynecol Scand* 1986;65(7):793-4.
- Papageorgiou A, Stern L. Antenatal prevention of the neonatal respiratory distress syndrome: benefits and potential risks for the mother and the infant. *J Perinat Med* 1986;14(2):75-86.
- Papageorgiou AN, Doray J-L, Ardilis R, Kunos I. Reduction of mortality, morbidity and respiratory distress syndrome in infants weighing less than 1,000 grams by treatment with betamethasone and ritodrine. *Pediatrics* 1989;83:493-7.
- Parsons MT, Sobel D, Cummiskey K, Constantine L, Roitman J. Steroid, antibiotic and tocolytic versus no steroid, antibiotic and tocolytic management in patients with preterm rupture PROM at 25-32 weeks. Paper presented at: 8th Annual Meeting of the Society of Perinatal Obstetricians; 1988 Feb 4-6; Las Vegas, Nevada.
- Philipsen T, Eriksen PS, Lynggard F. Pulmonary edema following ritodrine-saline infusion in premature labor. *Obstet Gynecol* 1981 Sep;58(3):304-8.
- Phuapradit W, Pongthai S, Chaturachinda K. A five-year experience with terbutaline for preterm labor. *J Med Assoc Thail* 1986;69(4):224-8.
- Robertson PA, Herron M, Katz M, Creasy RK. Maternal morbidity associated with isoxsuprine and terbutaline tocolysis. *Eur J Obstet Gynecol Reprod Biol* 1981 May;11(6):371-8.
- Russi EW, Spaetling L, Gmur J, Schneider H. High permeability pulmonary edema (ARDS) during tocolytic therapy--a case report. *J Perinat Med* 1988;16(1):45-9.
- Sabin S, Diss E, Porreco RP. Betamethasone TRH treatment of preterm fetuses alters the appearance of fetal heart rate tracings [abstract]. *Am J Obstet Gynecol* 1993;168(1 Pt 2):337.
- Salzer H, Lohninger A, Sevelde P, Legenstein E. [Stimulation of fetal lung maturation with carnitine]. *Gynaekol Rundsch* 1985;25(2):72-85. (Ger).
- Schellenberg JC, Liggins GC. New approaches to hormonal acceleration of fetal lung maturation. *J Perinat Med* 1987;15(5):447-52.
- Schutte MF, Treffers PE, Koppe JG, Breur W. The influence of betamethasone and orciprenaline on the incidence of respiratory distress syndrome in the newborn after preterm labour. *Br J Obstet Gynaecol* 1980 Feb;87(2):127-31.
- Spatling L, Staisch KJ, Huch R, Huch A. Effect of ritodrine and betamethasone on metabolism, respiration, and circulation. *Am J Perinatol* 1986 Jan;3(1):41-6.
- Stubblefield PG. Pulmonary edema occurring after therapy with dexamethasone and terbutaline for premature labor: a case report. *Am J Obstet Gynecol* 1978 Oct 1;132(3):341-2.
- Szczurowicz A, Witczak A, Rumistrzewicz E. [Effect of glucocorticoids, tocolytics and oxytocin on the status and fate of premature infants]. *Wiad Lek* 1988 Sep 15;41(18):1197-203. (Pol).
- Van Dorsten JP, Horger EO 3d, Miller MC. Preterm rupture of the membranes: combination therapy. *Am J Obstet Gynecol* 1985 Sep 15;153(2):147-53.
- Wilkins I, Creasy RK. Preterm labor. *Clin Obstet Gynecol* 1990 Sep;33(3):502-14.
- Wolff F, Carstens V, Fischer JH, Behrenbeck D, Bolte A. Cardiopulmonary effects of betamimetic tocolytic and glucocorticoid therapy in pregnant women. *Arch Gynecol* 1986;239(1):49-58.

High-Risk Pregnancies

- Alba E, Proserpio D. [Premature rupture of the membranes. Therapy and materno-neonatal prognosis. Our case series]. *Minerva Ginecol* 1987 Nov 11;39(11):727-35. (Ita).
- Arias F, Knight AB, Tomich PB. A retrospective study on the effects of steroid administration and prolongation of the latent phase in patients with preterm premature rupture of the membranes. *Am J Obstet Gynecol* 1986 May;154(5):1059-63.
- Baillie P, Malan AF, Saunders MC, Davey DA. The active management of pre-term labour and its effects on fetal outcome. *Aust N Z J Obstet Gynaecol* 1976 May;16(2):94-9.
- Barrett JM, Boehm FH. Comparison of aggressive and conservative management of premature rupture of fetal membranes. *Am J Obstet Gynecol* 1982 Sep 1;144(1):12-6.
- Berclaz G, Gyr T, Bratschi HU, Markus D, Schneider H. [Induction of lung maturation in the early stage of premature rupture of fetal membranes]. *Gynakol Rundsch* 1991;31 Suppl 2:108-10. (Ger).
- Bibbo M, Gill WB, Azizi F, Blough R, Fang VS, Rosenfield RL, Schumacher GF, Sleeper K, Sonek MG, Wied GL. Follow-up study of male and female offspring of DES-exposed mothers. *Obstet Gynecol* 1977 Jan;49(1):1-8.
- Bryan H, Hawrylyshyn P, Hogg-Johnson S, Inwood S, Finley A, D'Costa M, Chipman M. Perinatal factors associated with the respiratory distress syndrome. *Am J Obstet Gynecol* 1990 Feb;162(2):476-81.
- Burkart W, Dame WR, Holzgreve W, Schneider HP. [Significance of hormones in the amniotic fluid. II. STH and corticoids]. *Geburtshilfe Frauenheilkd* 1985 Nov;45(11):809-12. (Ger).
- Burkett G, Bauer CR, Morrison JC, Curet LB. Effect of prenatal dexamethasone administration on prevention of respiratory distress syndrome in twin pregnancies. *J Perinatol* 1986;6:304-8.
- Capeless EL, Mead PB. Management of preterm premature rupture of membranes: lack of a national consensus. *Am J Obstet Gynecol* 1987 Jul;157(1):11-2.
- Chalmers I, Hetherington J, Newdick M, Mutch L, Grant A, Enkin M, Enkin E, Dickersin K. The Oxford Database of Perinatal Trials: developing a register of published reports of controlled trials. *Controlled Clin Trials* 1986 Dec;7(4):306-24.
- Chapman MG. Salbutamol-induced acidosis in pregnant diabetics [letter]. *Br Med J* 1977 Mar 5;1(6061):639-40.
- Collins R, Yusuf S, Peto R. Overview of randomised trials of diuretics in pregnancy. *Br Med J (Clin Res Ed)* 1985 Jan 5;290(6461):17-23.
- Creasy RK. Preterm birth prevention: where are we? *Am J Obstet Gynecol* 1993 Apr;168(4):1223-30.
- Crowley P. Corticosteroids after preterm premature rupture of membranes. *Obstet Gynecol Clin North Am* 1992 Jun;19(2):317-26.
- Cunningham FG, MacDonald PC, Gant NF, Leveno KJ, Gilstrap LC. Preterm and postterm pregnancy and fetal growth retardation. In: Cunningham FG, et al., editors. *Williams obstetrics*. 19th ed. Norwalk (CN): Appleton & Lange; 1993. p. 868-70.
- Eriksen NL, Blanco JD. The role of corticosteroids in the management of patients with preterm premature rupture of the membranes. *Clin Obstet Gynecol* 1991 Dec;34(4):694-701.
- Farrag OA. Prospective study of 3 metabolic regimens in pregnant diabetics. *Aust N Z J Obstet Gynaecol* 1987 Feb;27(1):6-9.
- Finley J, Katz M, Rojas-Perez M, Roberts JM, Creasy RK, Schiller NB. Cardiovascular consequences of beta-agonist tocolysis: an echocardiographic study. *Obstet Gynecol* 1984 Dec;64(6):787-91.
- Garite TJ, Freeman RK, Linzey EM, et al. Prospective randomized study of corticosteroids in the management of premature rupture of the membranes and the premature gestation. *Am J Obstet Gynecol* 1981;141:508-15.
- Gjerdingen DK. Premature labor, Part II: Management. *J Am Board Fam Pract* 1992 Nov-Dec;5(6):601-15.
- Hays PM, Smeltzer JS. Multiple gestation. *Clin Obstet Gynecol* 1986 Jun;29(2):264-85.
- Heyborne KD, Burke MS, Porreco RP. Prolongation of premature gestation in women with hemolysis, elevated liver enzymes and low platelets. A report of five cases. *J Reprod Med* 1990 Jan;35(1):53-7.
- Heytmanek G, Salzer H, Vityska-Binstorfer E, Genger H, Metka M, Pfersmann R, Wolff F, Weidinger H. [Ambroxol versus betamethasone for the promotion of antepartum lung maturity in pathological pregnancies]. *Wien Klin Wochenschr* 1990 Aug 3;102(15):443-8. (Ger).
- Hornnes PJ, Kuhl C. Gastrointestinal hormones and cortisol in normal pregnant women and women with gestational diabetes. *Acta Endocrinol Suppl (Copenh)* 1986;277:24-6.
- Howie RN, Liggins GC. Clinical trial of antepartum betamethasone therapy for prevention of respiratory distress in pre-term infants. In: Anderson AB, et al., editors. *Pre-term labour*. Proceedings of the 5th

- Study Group of the Royal College of Obstetricians and Gynaecologists; 1977 Oct 5-6. London: Royal College of Obstetricians and Gynaecologists; 1977. p. 281-9.
- Huch A. [Clinical management of premature rupture of fetal membranes to the 35th week]. *Arch Gynecol* 1985;238(1-4):241-50. (Ger).
- Huel G, Keller E, Gueguen S, Robert C, Bouyer J, Papiernik E, Mamelle N, Laumon B, Munoz F, Collin D, et al. Effective prevention of preterm birth: the French experience measured at Haguenu. *Birth Defects* 1989;25(1):1-234.
- Hutson JM, Driscoll JM, Fox HE, Driscoll YT, Steir ME. The effect of obstetric management on neonatal mortality and morbidity for infants weighing 700-1000 grams. *Am J Perinatol* 1986 Jul;3(3):255-61.
- Hwang JL, Hsu MC, Yang YS, Lee TY. Hypertensive disorders in pregnancy: analysis of 100 cases. *J Formosan Med Assoc* 1989;88(6): 572-8.
- Iams JD, Talbert ML, Barrows H, Sachs L. Management of preterm prematurely ruptured membranes: a prospective randomized comparison of observation versus use of steroids and timed delivery. *Am J Obstet Gynecol* 1985 Jan 1; 151(1):32-8.
- Ikeno N, Takahashi K. [Studies on changes in serum estrone, estradiol, estriol, DHA-S, and cortisol and urinary estriol excretion]. *Nippon Sanka Fujinka Gakkai Zasshi* 1985 Jan;37(1):99-106. (Jpn).
- James D. Preterm prelabour rupture of membranes. *Arch Dis Child* 1991 Jul;66(7 Spec No):812-5.
- Kaibara M. [Management of premature rupture of the membranes]. *Nippon Sanka Fujinka Gakkai Zasshi* 1987 Sep;39(9):1659-64. (Jpn).
- Kappy KA, Cetrulo CL, Knuppel RA, Ingardia CJ, Sbarra AJ, Scerbo JC, Mitchell GW. Premature rupture of the membranes: a conservative approach. *Am J Obstet Gynecol* 1979 Jul 15;134(6):655-61.
- Kari MA, Hallman M, Eronon M, Teramo K, Virtanen M, Koivisto N, Ikonen RS. Prenatal dexamethasone treatment in conjunction with rescue therapy of human surfactant - a randomized placebo-controlled multicenter study. *Pediatrics*. Forthcoming 1994.
- Keirse MJ, Ohlsson A, Treffers PE, Kanhai HH. Prelabour rupture of the membranes preterm. In: Chalmers I, Enkin M, Keirse MJ, editors. *Effective care in pregnancy and childbirth*. New York: Oxford University Press; 1989. p. 666-93.
- Kennedy KA, Clark SL. Premature rupture of the membranes: management controversies. *Clin Perinatol* 1992 Jun;19(2):385-97.
- King JF, Grant A, Keirse MJ, Chalmers I. Beta-mimetics in preterm labour: an overview of the randomized controlled trials. *Br J Obstet Gynaecol* 1988 Mar;95(3):211-22.
- Kleinschmidt R, Schroder M, Preibsch W, Mattheus R, Hofmann D. [Induction of lung maturation in pending premature delivery and scheduled premature delivery]. *Zentralbl Gynakol* 1977; 99(3):147-54. (Ger).
- Kuhn RJ, Speirs AL, Pepperell RJ, Eggers TR, Doyle LW, Hutchison A. Betamethasone, albuterol, and threatened premature delivery: benefits and risks. Study of 469 pregnancies. *Obstet Gynecol* 1982 Oct;60(4):403-8.
- Laatikainen T, Virtanen T, Kaaja R, Salminen-Lappalainen K. Corticotropin-releasing hormone in maternal and cord plasma in pre-eclampsia. *Eur J Obstet Gynecol Reprod Biol* 1991 Mar 21;39(1):19-24.
- Lamont RF. The management of preterm labour. *Clin Obstet Gynaecol* 1986 Jun;13(2):231-46.
- Leigh J, Garite TJ. Amniocentesis and the management of premature labor. *Obstet Gynecol* 1986 Apr;67(4):500-6.
- Lewis PJ, de Swiet M, Boylan P, Bulpitt CJ. How obstetricians in the United Kingdom manage preterm labour. *Br J Obstet Gynaecol* 1980 Jul; 87(7):574-7.
- Lips U. [Drug therapy in eclampsia]. *Dtsch Med Wochenschr* 1985 Jun 21;110(25):1007-8. (Ger).
- Lorenz U, Jurgens S, Ragosch V, Kipper-Kreissl B, Weitzel H. [Medical prevention of respiratory distress syndrome]. *Gynakologe* 1991 Aug;24(4): 223-7. (Ger).
- Magann EF, Graves GR, Roberts WE, Blake PG, Morrison JC, Martin JN Jr. Corticosteroids for enhanced fetal lung maturation in patients with HELLP syndrome: impact on neonates. *Aust N Z J Obstet Gynaecol* 1993 May;33(2):131-5.
- Magann EF, Martin RW, Isaacs JD, Blake PG, Morrison JC, Martin JN Jr. Corticosteroids for the enhancement of fetal lung maturity: impact on the gravida with preeclampsia and the HELLP syndrome. *Aust N Z J Obstet Gynaecol* 1993 May; 33(2):127-31.
- Maher J, Goldenberg R, Cliver S, Davis R, Copper R. Corticosteroid efficacy in very premature infants [abstract]. *Am J Obstet Gynecol* 1993;168(1 Pt 2):374.
- Maher J, Goldenberg RL. Outcomes of very-low-birth-weight infants after maternal corticosteroid therapy before 28 weeks' gestation [letter]. *Am J Obstet Gynecol* 1993 Nov;169(5):1363-4.

- Malee MP. Expectant and active management of preterm premature rupture of membranes. *Obstet Gynecol Clin North Am* 1992;19(2):309-15.
- Marshall CL, Hayashi RH. Obstetric management of the very low birth weight fetus. *Clin Perinatol* 1986 Jun;13(2):251-65.
- Mead PB, Clapp JF 3d. The use of betamethasone and timed delivery in management of premature rupture of the membranes in the preterm pregnancy. *J Reprod Med* 1977 Jul;19(1):3-7.
- Menashe Y, Ben-Baruch G, Greenspoon JS, Carp HJ, Rosen DJ, Mashiach S, Many A. Successful pregnancy outcome with combination therapy in women with the antiphospholipid antibody syndrome. *J Reprod Med* 1993 Aug;38(8):625-9.
- Miodovnik M, Peros N, Holroyde JC, Siddiqi TA. Treatment of premature labor in insulin-dependent diabetic women. *Obstet Gynecol* 1985 May;65(5):621-7.
- Morrison JC, Schneider JM, Whybrew WD, Bucovaz ET. Effect of corticosteroids and fetomaternal disorders on the L:S ratio. *Obstet Gynecol* 1980 Nov;56(5):583-90.
- Nabijan AA. Antepartum glucocorticoids in preterm labor: a review. *Singapore J Obstet Gynaecol* 1990;21(3):147-52.
- Nelson LH, Meis PJ, Hatjis CG, Ernest JM, Dillard R, Schey HM. Premature rupture of membranes: a prospective, randomized evaluation of steroids, latent phase, and expectant management. *Obstet Gynecol* 1985 Jul;66(1):55-8.
- Nwaesei CG, Young DC, Byrne JM, Vincer MJ, Sampson D, Evans JR, Allen AC, Stinson DA. Preterm birth at 23 to 26 weeks' gestation: is active obstetric management justified? *Am J Obstet Gynecol* 1987 Oct;157(4 Pt 1):890-7.
- Nwosu U. Management of premature rupture of membranes [abstract]. *Am J Obstet Gynecol* 1992;166(1 Pt 2):425.
- Odendaal HJ, Pattinson RC, Bam R, Grove D, Kotze TJ. Aggressive or expectant management for patients with severe preeclampsia between 28-34 weeks' gestation: a randomized controlled trial. *Obstet Gynecol* 1990 Dec;76(6):1070-5.
- Ogburn PL Jr, Julian TM, Williams PP, Thompson TR. The use of magnesium sulfate for tocolysis in preterm labor complicated by twin gestation and betamimetic-induced pulmonary edema. *Acta Obstet Gynecol Scand* 1986;65(7):793-4.
- Ohlsson A. Treatments of preterm premature rupture of the membranes: a meta-analysis. *Am J Obstet Gynecol* 1989 Apr;160(4):890-906. Comment in: *Am J Obstet Gynecol* 1990 May;162(5):1353-5.
- Olofsson P, Rydholm H, Sjöberg NO. How Swedish obstetricians manage premature rupture of the membranes in preterm gestations. *Am J Obstet Gynecol* 1988 Nov;159(5):1028-34.
- Papageorgiou AN, Colle E, Farri-Kostopoulos E, Gelfand MM. Incidence of respiratory distress syndrome following antenatal betamethasone: role of sex, type of delivery, and prolonged rupture of membranes. *Pediatrics* 1981 May;67(5):614-7.
- Parsons MT, Sobel D, Cummiskey K, Constantine L, Roitman J. Steroid, antibiotic and tocolytic versus no steroid, antibiotic and tocolytic management in patients with preterm PROM at 25-32 weeks. Paper presented at: 8th Annual Meeting of the Society of Perinatal Obstetricians; 1988 Feb 4-6; Las Vegas, Nevada.
- Prober CG. The risk of dexamethasone in pregnant women with a history of recurrent genital herpes. *Pediatr Infect Dis J* 1991 Jan;10(1):82-3.
- Quiel V. [Conservative treatment of HELLP syndrome]. *Zentralbl Gynakol* 1993;115(8):378-80. (Ger).
- Ron-El R, Mor Z, Weinraub Z, Schreyer P, Bukovsky I, Dolphin Z, Goldberg M, Caspi E. Triplet, quadruplet and quintuplet pregnancies. Management and outcome. *Acta Obstet Gynecol Scand* 1992 Jul;71(5):347-50.
- Salzer H. [Premature rupture of the fetal membranes and fetal lung maturity]. *Gynakol Rundsch* 1989;29 Suppl 2:132-6. (Ger).
- Schutte MF, Treffers PE, Koppe JG, Breur W. The influence of betamethasone and oriprenaline on the incidence of respiratory distress syndrome in the newborn after preterm labour. *Br J Obstet Gynaecol* 1980 Feb;87(2):127-31.
- Schutte MF, Treffers PE, Koppe JG, Breur W, Filedt Kok JC. [Clinical application of corticosteroids for acceleration of fetal lung maturity]. *Ned Tijdschr Geneesk* 1979 Mar 17;123(11):420-7. (Dut).
- Silver RK, MacGregor SN, Farrell EE, Sholl JS, Hobart ED. Antenatal steroid therapy before 33 weeks' gestation. *Int J Gynaecol Obstet* 1993 Apr;41(1):23-6.
- Simpson GF, Harbert GM Jr. Use of beta-methasone in management of preterm gestation with premature rupture of membranes. *Obstet Gynecol* 1985 Aug;66(2):168-75.
- Spinnato JA. Infrequency of pulmonary immaturity in an indigent population with preterm premature rupture of the membranes. *Obstet Gynecol* 1987;69(6):942-4.
- Suidan JS, Baassiri G. Respiratory distress syndrome: differential effects of prenatal steroid therapy and

- prolonged rupture of the membranes. *Int J Gynaecol Obstet* 1990 Jul;32(3):237-42.
- Taslimi MM, Sibai BM, Amon E, Taslimi CK, Herrick CN. A national survey on preterm labor. *Am J Obstet Gynecol* 1989 Jun;160(6):1352-7; discussion 1357-60.
- Teramo K, Hallman M, Raivio KO. Maternal glucocorticoid in unplanned premature labor. Controlled study on the effects of betamethasone phosphate on the phospholipids of the gastric aspirate and on the adrenal cortical function of the newborn infant. *Pediatr Res* 1980 Apr;14(4 Pt 1):326-9.
- Theunissen I, van Lierde M. Preterm premature rupture of the membranes: neonatal outcome in 215 cases of an active conservative management. *J Perinat Med* 1989;17(6):423-32.
- Trudinger BJ, Boshell L. A survey of the management of premature labour by Australian obstetricians. *Aust N Z J Obstet Gynaecol* 1987 Aug;27(3):188-95.
- Tubman TR, Rollins MD, Patterson C, Halliday HL. Increased incidence of respiratory distress syndrome in babies of hypertensive mothers. *Arch Dis Child* 1991 Jan;66(1 Spec No):52-4.
- Van Dorsten JP, Horgner EO 3d, Miller MC. Preterm rupture of the membranes: combination therapy. *Am J Obstet Gynecol* 1985 Sep 15;153(2):147-53.
- Weitzel HK, Lorenz U, Kipper B. Clinical aspects of antenatal glucocorticoid treatment for prevention of neonatal respiratory distress syndrome. *J Perinat Med* 1987;15(5):441-6.
- Wilkins I, Creasy RK. Preterm labor. *Clin Obstet Gynecol* 1990 Sep;33(3):502-14.
- Wulf KH, Emmrich P, Graeff H, Huch A, Kunzel W, Ludwig H, Wulf KH. [Pregnancy monitoring and labor induction following premature rupture of fetal membranes]. *Arch Gynecol* 1985;238(1-4):257-62. (Ger).
- Ziokowski K, Godziejewski J, Turowski J, Zaucka K. [Method of management of premature labor in twin pregnancies using glucocorticoids]. *Ginekol Pol* 1985 Apr;56(4):229-34. (Pol).
- Ziokowski K, Szymanska AD, Turowski J, Zaucka K. [A method of management of premature labor using glucocorticoids]. *Ginekol Pol* 1985 May-Jun; 56(5-6):348-52. (Pol).
- Pharmacology**
- Addison RS, Maguire DJ, Mortimer RH, Roberts MS, Cannell GR. Pathway and kinetics of prednisolone metabolism in the human placenta. *J Steroid Biochem Mol Biol* 1993 Mar;44(3):315-20.
- Bacigalupo G, Langner K, Schmidt S, Saling E. Plasma immunoreactive beta-endorphin, ACTH and cortisol concentrations in mothers and their neonates immediately after delivery--their relationship to the duration of labor. *J Perinat Med* 1987;15(1):45-52.
- Bagramian ER, Fanchenko ND, Malysheva VA. [Plasma levels of corticosteroid and thyroid hormones in physiologic pregnancy]. *Akush Ginekol (Mosk)* 1987 Feb;(2):29-32. (Rus).
- Ballard PL, Ballard RA, Creasy RK, Padbury J, Polk DH, Bracken M, Moya FR, Gross I. Plasma thyroid hormones and prolactin in premature infants and their mothers after prenatal treatment with thyrotropin-releasing hormone. *Pediatr Res* 1992 Dec;32(6):673-8.
- Ballard PL, Granberg P, Ballard RA. Glucocorticoid levels in maternal and cord serum after prenatal betamethasone therapy to prevent respiratory distress syndrome. *J Clin Invest* 1975 Dec;56(6):1548-54.
- Brien TG. Pathophysiology of free cortisol in plasma. *Ann N Y Acad Sci* 1988;538:130-6.
- Chan EC, Smith R, Lewin T, Brinsmead MW, Zhang HP, Cubis J, Thornton K, Hurt D. Plasma corticotropin-releasing hormone, beta-endorphin and cortisol inter-relationships during human pregnancy. *Acta Endocrinol (Copenh)* 1993 Apr;128(4):339-44.
- Charnvise S, Fencel MD, Osathanondh R, Zhu MG, Underwood R, Tulchinsky D. Adrenal steroids in maternal and cord blood after dexamethasone administration at midterm. *J Clin Endocrinol Metab* 1985 Dec;61(6):1220-2.
- Chernukha EA, Komissarova LM, Malysheva VA, Abubakirova AM, Galstian AA. [Cortisol contents in maternal and umbilical artery blood during delivery of low birth weight fetuses]. *Akush Ginekol (Mosk)* 1989 Jan;(1):26-30. (Rus).
- Darne FJ, McGarrigle HH, Lachelin GC. Diurnal variation of plasma and saliva oestrogen, progesterone, cortisol and plasma dehydroepiandrosterone sulphate in late pregnancy. *Eur J Obstet Gynecol Reprod Biol* 1989 Aug;32(2):57-66.
- Davies DP. Placental insufficiency and its effect on the fetus and adult disease [letter]. *Lancet* 1993 Mar 27;341(8848):827. Comment on: *Lancet* 1993 Feb 6;341(8841):355-7.
- Dorr HG, Heller A, Versmold HT, Sippell WG, Herrmann M, Bidlingmaier F, Knorr D. Longitudinal study of progestins, mineralocorticoids, and glucocorticoids throughout human pregnancy. *J Clin Endocrinol Metab* 1989 May;68(5):863-8.

- Dorr HG, Sippell WG, Versmold HT, Bidlingmaier F, Knorr D. Plasma aldosterone and 11-deoxycortisol in term neonates: a reevaluation. *J Clin Endocrinol Metab* 1987 Jul;65(1):208-10.
- Dorr HG, Versmold HT, Sippell WG, Bidlingmaier F, Knorr D. Antenatal betamethasone therapy: effects on maternal, fetal, and neonatal mineralocorticoids, glucocorticoids, and progestins. *J Pediatr* 1986 Jun;108(6):990-3.
- Goland RS, Conwell IM, Warren WB, Wardlaw SL. Placental corticotropin-releasing hormone and pituitary-adrenal function during pregnancy. *Neuroendocrinology* 1992;56(5):742-9.
- Goland RS, Wardlaw SL, Blum M, Tropper PJ, Stark RI. Biologically active corticotropin-releasing hormone in maternal and fetal plasma during pregnancy. *Am J Obstet Gynecol* 1988;159(4):884-90.
- Goretzlehner G, Wodrig W, Goretzlehner U. [Sex-specific differences in the cortisol level post-partum]. *Z Geburtshilfe Perinatol* 1987 Mar-Apr;191(2):71-2. (Ger).
- Hanes RC Jr. Adrenocorticotrophic hormone: adrenocortical steroids and their synthetic analogs; inhibitors of the synthesis and actions of adrenocortical hormones. In: Gilman AG, et al., editors. *Goodman and Gilman's the pharmacological basis of therapeutics*. 8th ed. New York: Pergamon Press; 1990. p. 1431-59.
- Haning RV Jr, Curet LB, Poole WK, Boehnlein LM, Kuzma DL, Meier SM. Effects of fetal sex and dexamethasone on preterm maternal serum concentrations of human chorionic gonadotropin, progesterone, estrone, estradiol, and estriol. *Am J Obstet Gynecol* 1989 Dec;161(6 Pt 1):1549-53.
- Hercz P. Quantitative changes in steroid and peptide hormones in the maternal-fetoplacental system between the 28th-40th weeks of pregnancy. *Acta Med Hung* 1985;42(1-2):29-39.
- Hercz P, Siklos P, Ungar L. Serum cortisol level changes in the maternal-fetoplacental unit between the 28th-40th weeks of pregnancy. *Acta Physiol Hung* 1987;69(2):161-5.
- Hercz P, Siklos P, Ungar L. Serum dehydroepiandrosterone and cortisol concentration in the maternal-fetoplacental hormonal system in elective caesarean section and spontaneous vaginal delivery in the 28th to 36th and 40th weeks of pregnancy. *Gynecol Obstet Invest* 1990;29(2):112-4.
- Hornes PJ, Kuhl C. Gastrointestinal hormones and cortisol in normal pregnant women and women with gestational diabetes. *Acta Endocrinol Suppl (Copenh)* 1986;277:24-6.
- Hustead VA, Zachman RD. The effect of antenatal dexamethasone on maternal and fetal retinol-binding protein. *Am J Obstet Gynecol* 1986 Jan;154(1):203-5.
- Ikeno N, Takahashi K. [Studies on changes in serum estrone, estradiol, estriol, DHA-S, and cortisol and urinary estriol excretion]. *Nippon Sanka Fujinka Gakkai Zasshi* 1985 Jan;37(1):99-106. (Jpn).
- Jaskiewicz J, Szafran Z, Szafran H, Sztefko K, Sucharski P. The relation between growth hormone, cortisol and insulin and plasma levels of free fatty acids and glucose in healthy mothers at delivery and their newborn children. *Endokrynol Pol* 1985;36(4):205-13.
- Kono H, Furuhashi N, Shinkawa O, Takahashi T, Tsujiei M, Yajima A. The maternal serum cortisol levels after onset of labor. *Tohoku J Exp Med* 1987 Jun;152(2):133-7.
- Kubota T, Tsuzuki H, Saito M. Determination of prolactin, growth hormone, beta-endorphin, and cortisol in both maternal plasma and amniotic fluid during human gestation. *Acta Endocrinol (Copenh)* 1989 Aug;121(2):297-303.
- Laatikainen T, Virtanen T, Kaaja R, Salminen-Lappalainen K. Corticotropin-releasing hormone in maternal and cord plasma in pre-eclampsia. *Eur J Obstet Gynecol Reprod Biol* 1991 Mar 21;39(1):19-24.
- Lao TT, Panesar NS. The effect of labour on prolactin and cortisol concentrations in the mother and the fetus. *Eur J Obstet Gynecol Reprod Biol* 1989 Mar;30(3):233-8.
- Laudat MH, Guilhaume B, Blot P, Fournier C, Giaucue JP, Luton JP. [The hormonal state of pregnancy: modification of cortisol and testosterone]. *Ann Endocrinol (Paris)* 1987;48(4):334-8. (Fre).
- Lauterbach R, Szafran H, Szafran Z. Blood glucose concentration and the levels of cortisol, growth hormone and insulin in women at labour and their healthy neonates born by vaginal delivery and cesarean section. *Endokrynol Pol* 1988;39(4):169-79.
- Murphy BE, Clark SJ, Donald IR, Pinsky M, Vedady D. Conversion of maternal cortisol to cortisone during placental transfer to the human fetus. *Am J Obstet Gynecol* 1974 Feb 15;118(4):538-41.
- Nahoul K, Daffos F, Forestier F, Scholler R. Cortisol, cortisone and dehydroepiandrosterone sulfate levels in umbilical cord and maternal plasma between 21 and 30 weeks of pregnancy. *J Steroid Biochem* 1985 Oct;23(4):445-50.
- Neri A, Merlob P, Kaplan B, Ovadia Y, Kaufman H. Maternal and cord plasma cortisol and aldosterone levels at delivery, in various ethnic groups in Israel.

- Preliminary report. *Isr J Med Sci* 1986 Jul-Aug; 22(7-8):576-8.
- Neumark J, Hammerle AF, Biegelmayr C. Effects of epidural analgesia on plasma catecholamines and cortisol in parturition. *Acta Anaesthesiol Scand* 1985 Aug;29(6):555-9.
- Noguchi M. [Changes in human serum corticosterone and cortisol during pregnancy, labor and delivery]. *Nippon Sanka Fujinka Gakkai Zasshi* 1988 Jan; 40(1):14-20. (Jpn).
- Okamoto E, Takagi T, Makino T, Sata H, Iwata I, Nishino E, Mitsuda N, Sugita N, Otsuki Y, Tanizawa O. Immunoreactive corticotropin-releasing hormone, adrenocorticotropin and cortisol in human plasma during pregnancy and delivery and postpartum. *Horm Metab Res* 1989 Oct;21(10): 566-72.
- Partsch CJ, Sippell WG, MacKenzie IZ, Aynsley-Green A. The steroid hormonal milieu of the undisturbed human fetus and mother at 16-20 weeks gestation. *J Clin Endocrinol Metab* 1991;73(5):969-74.
- Petersen MC, Nation RL, Ashley JJ, McBride WG. The placental transfer of betamethasone. *Eur J Clin Pharmacol* 1980 Oct;18(3):245-7.
- Phocas I, Sarandakou A, Rizos D. Maternal serum total cortisol levels in normal and pathologic pregnancies. *Int J Gynaecol Obstet* 1990 Jan; 31(1):3-8.
- Prendiville W, Elbourne D, Chalmers I. The effects of routine oxytocic administration in the management of the third stage of labour: an overview of the evidence from controlled trials. *Br J Obstet Gynaecol* 1988 Jan;95(1):3-16.
- Pschera H, Persson B, Lunell NO. Amniotic fluid C-peptide and cortisol in normal and diabetic pregnancies and pregnancies accompanied by fetal growth retardation. *Am J Perinatol* 1986 Jan; 3(1):16-21.
- Radikov N, Lyutakova E. A study of the effect of corticosteroids on the serum concentration of specific beta 1-glycoprotein. *Folia Med (Plovdiv)* 1989;31(1):36-9.
- Saito K, Nishijima M, Horiuchi S. [Changes in glucocorticoid receptor in human placentas: correlation with cortisol levels in maternal and umbilical cord plasma]. *J Iwatw Med Assoc* 1990; 42(6):837-46. (Jpn).
- Tropper PJ, Goland RS, Wardlaw SL, Fox HE, Frantz AG. Effects of betamethasone on maternal plasma corticotropin releasing factor, ACTH and cortisol during pregnancy. *J Perinat Med* 1987;15(3): 221-5.
- Vleugels MP, Eling WM, Rolland R, de Graaf R. Cortisol levels in human pregnancy in relation to parity and age. *Am J Obstet Gynecol* 1986 Jul; 155(1):118-21.
- Welshons WV, Lieberman ME, Gorski J. Nuclear localization of unoccupied oestrogen receptors. *Nature* 1984 Feb 23-29;307(5953):747-9.
- Westphal U. Steroid-protein interactions II. *Monogr Endocrinol* 1986;27:1-603.
- Zheng SH. [Cortisol levels in maternal and cord blood and amniotic fluid in late pregnancy and labor]. *Chung Hua Fu Chan Ko Tsa Chih* 1986 Mar;21(2): 72-5, 125. (Chi).

ECONOMICS

- Boyle MH, Torrance GW, Sinclair JC, Horwood SP. Economic evaluation of neonatal intensive care of very-low-birth-weight infants. *N Engl J Med* 1983 Jun 2;308(22):1330-7.
- Egberts J. Estimated costs of different treatments of the respiratory distress syndrome in a large cohort of preterm infants of less than 30 weeks of gestation. *Biol Neonate* 1992;61 Suppl 1:59-65.
- Eidelman AI. Economic consequences of surfactant therapy. *J Perinatol* 1993 Mar-Apr;13(2):137-9.
- Ewald U. What is the actual cost of neonatal intensive care? *Int J Technol Assess Health Care* 1991;7 Suppl 1:155-61.
- Hope P. Exogenous surfactants [editorial]. *BMJ* 1991 Oct 5;303(6806):799-800.
- Huel G, Keller E, Gueguen S, Robert C, Bouyer J, Papiernik E, Mamelle N, Laumon B, Munoz F, Collin D, et al. Effective prevention of preterm birth: the French experience measured at Haguenau. *Birth Defects* 1989;25(1):1-234.
- Johnson DE, Munson DP, Thompson TR. Effect of antenatal administration of dexamethasone on hospital cost and survival of premature infants. *Pediatrics* 1981;68:633-7.
- Kitchen WH, Bowman E, Callanan C, Campbell NT, Carse EA, Charlton M, Doyle LW, Drew J, Ford GW, Gore J, et al. The cost of improving the outcome for infants of birthweight 500-999 g in Victoria. The Victorian Infant Collaborative Study Group. *J Paediatr Child Health* 1993 Feb;29(1):56-62.
- Maniscalco WM, Kendig JW, Shapiro DL. Surfactant replacement therapy: impact on hospital charges for premature infants with respiratory distress syndrome. *Pediatrics* 1989 Jan;83(1):1-6.
- Merritt TA, Hallman M, Vaucher Y, McFeeley E, Tubman TR. Impact of surfactant treatment on cost of neonatal intensive care: a cost-benefit analysis. *J Perinatol* 1990 Dec;10(4):416-9.
- Mugford M, Piercy J, Chalmers I. Cost implications of different approaches to the prevention of respiratory distress syndrome. *Arch Dis Child* 1991 Jul;66(7 Spec No):757-64.
- Paneth N, Guillemin J, Harrison H, Campbell N, Mercier CE. Roundtable: survival and outcome of the extremely low-birthweight infant. *Birth* 1992 Sep;19(3):154-61.
- Sinclair JC. Economic evaluation of neonatal intensive care. Which variables have to be known? *Int J Technol Assess Health Care* 1991;7 Suppl 1:146-50.
- State of Florida Hospital Containment Board. Neonatal intensive care study. Tallahassee (FL): The Board; 1987 Jan.
- Stevenson RC, Pharoah PO, Cooke RW, Sandhu B. Predicting costs and outcomes of neonatal intensive care for very low birthweight infants. *Public Health* 1991 Mar;105(2):121-6.
- Storch TG. The unkindest cut [editorial]. *Am J Dis Child* 1990 May;144(5):533.
- Tubman TR, Halliday HL, Normand C. Cost of surfactant replacement treatment for severe neonatal respiratory distress syndrome: a randomised controlled trial. *BMJ* 1990 Oct 13;301(6756):842-5. Published erratum appears in *BMJ* 1991 Jan 5;302(6767):27.
- Tubman TR, Halliday HL, Normand C. Economic impact of porcine surfactant replacement (Curosurf) for severe neonatal respiratory distress syndrome. *J Perinat Med* 1991;19 Suppl 1:403-7.

META-ANALYSIS

- Agency for Health Care Policy and Research. Clinical classifications for health policy research: discharge statistics by principal diagnosis and procedure. Rockville (MD): The Agency; 1993 Aug. (AHCPR Pub. No. 93-0043).
- Aylward GP, Pfeiffer SI, Wright A, Verhulst SJ. Outcome studies of low birth weight infants published in the last decade: a metaanalysis. *J Pediatr* 1989 Oct;115(4):515-20. Comment in: *J Pediatr* 1990 Jul;117(1 Pt 1):167-8; *J Pediatr* 1990 Sep;117(3):511-2.
- Chalmers I, Hetherington J, Elbourne D, et al. Materials and methods used in synthesizing evidence to evaluate the effects of care during pregnancy and childbirth. In: Chalmers I, Enkin M, Keirse MJ, editors. *Effective care in pregnancy and childbirth*. New York: Oxford University Press; 1989. p. 39-65.
- Crowley P, Chalmers I, Keirse MJ. The effects of corticosteroid administration before preterm delivery: an overview of the evidence from controlled trials. *Br J Obstet Gynaecol* 1990 Jan;97(1):11-25. Comment in: *Br J Obstet Gynaecol* 1990 Jan;97(1):1-3.
- Dickersin K, Hewitt P, Mutch L, Chalmers I, Chalmers TC. Perusing the literature: comparison of MEDLINE searching with a perinatal trials database. *Controlled Clin Trials* 1985 Dec;6(4): 306-17.
- Escobar GJ, Littenberg B, Petitti DB. Outcome among surviving very low birthweight infants: a meta-analysis. *Arch Dis Child* 1991 Feb;66(2): 204-11.
- Gortner L. Natural surfactant for neonatal respiratory distress syndrome in very premature infants: a 1992 update. *J Perinat Med* 1992;20(6):409-19.
- Hetherington J, Dickersin K, Chalmers I, Meinert CL. Retrospective and prospective identification of unpublished controlled trials: lessons from a survey of obstetricians and pediatricians. *Pediatrics* 1989 Aug;84(2):374-80.
- Kattner E, Metz B, Waiss E, Obladen M. Accelerated lung maturation following maternal steroid treatment in infants born before 30 weeks gestation. *J Perinat Med* 1992;20(6):449-57.
- Ohlsson A. Treatment of preterm premature rupture of membranes: a meta-analysis. *Am J Obstet Gynecol* 1989;160:890-906.
- Peto R, Pike MC, Armitage P, Breslow NE, Cox DR, Howard SV, Mantel N, McPherson K, Peto J, Smith PG. Design and analysis of randomized clinical trials requiring prolonged observation of each patient. I. Introduction and design. *Br J Cancer* 1976 Dec;34(6):585-612.
- State of Florida Hospital Containment Board. Neonatal intensive care study. Tallahassee (FL): The Board; 1987 Jan.

ANIMAL MODELS**Behavior**

- Benesova O, Pavlik A. Behavioural teratogenic risk of perinatal glucocorticoid treatment. 21st Interdisciplinary Conference on Experimental and Clinical Study of Higher Nervous Functions (1985, Olomouc, Czechoslovakia). *Act Nerv Super* 1986 Sep;28(3):197-8.
- Benesova O, Pavlik A. Perinatal treatment with glucocorticoids and the risk of maldevelopment of the brain. *Neuropharmacology* 1989 Jan;28(1):89-97.
- Dygalo NN. [Emotional reactivity of rats and of their progeny after hormonal modification of the intrauterine development]. *Zh Vyssh Nerv Deiat* 1988 Jul-Aug;38(4):710-4. (Rus).
- Fujii T, Horinaka M, Hata M. Functional effects of glucocorticoid exposure during fetal life. *Prog Neuropsychopharmacol Biol Psychiatry* 1993 Mar;17(2):279-93.
- Schapiro S, Salas M, Vukovich K. Hormonal effects on ontogeny of swimming ability in the rat: assessment of central nervous system development. *Science* 1970 Apr 3;168(927):147-50.
- Cardiovascular Effects**
- Benediktsson R, Lindsay RS, Noble J, Seckl JR, Edwards CR. Glucocorticoid exposure in utero: new model for adult hypertension. *Lancet* 1993 Feb 6;341(8841):339-41. Published erratum appears in *Lancet* 1993 Feb 27;341(8844):572. Comment in: *Lancet* 1993 Mar 27;341(8848):828.
- Bian X, Briggs MM, Schachat FH, Seidler FJ, Slotkin TA. Glucocorticoids accelerate the ontogenetic transition of cardiac ventricular myosin heavy-chain isoform expression in the rat: promotion by prenatal exposure to a low dose of dexamethasone. *J Dev Physiol* 1992 Jul;18(1):35-42.
- Bian X, Seidler FJ, Olsen C, Raymond JR, Slotkin TA. Effects of fetal dexamethasone exposure on postnatal control of cardiac adenylate cyclase: beta-adrenergic receptor coupling to Gs regulatory protein. *Teratology* 1993 Aug;48(2):169-77.
- Bian X, Seidler FJ, Slotkin TA. Fetal dexamethasone exposure interferes with establishment of cardiac noradrenergic innervation and sympathetic activity. *Teratology* 1993 Feb;47(2):109-17.
- Bian XP, Seidler FJ, Bartolome J, Kavlock RJ, Bartolome M, Slotkin TA. Dose-dependent effect of prenatal dexamethasone treatment on beta-adrenergic receptor coupling to ornithine decarboxylase and cyclic AMP. *J Dev Physiol* 1990 Sep;14(3):125-30.
- Bian XP, Seidler FJ, Slotkin TA. Promotional role for glucocorticoids in the development of intracellular signalling: enhanced cardiac and renal adenylate cyclase reactivity to beta-adrenergic and non-adrenergic stimuli after low-dose fetal dexamethasone exposure. *J Dev Physiol* 1991 Dec;16(6):331-9.
- Bian XP, Seidler FJ, Slotkin TA. Promotional role for glucocorticoids in the development of intracellular signalling: enhanced cardiac and renal adenylate cyclase reactivity to beta-adrenergic and non-adrenergic stimuli after low-dose fetal dexamethasone exposure. *J Dev Physiol* 1992 Jun;17(6):289-97.
- Hou QC, Slotkin TA. Effects of prenatal dexamethasone or terbutaline exposure on development of neural and intrinsic control of heart rate. *Pediatr Res* 1989 Dec;26(6):554-7.
- Matsubara H, Hirata Y, Yoshimi H, Takata S, Takagi Y, Iida T, Yamane Y, Umeda Y, Nishikawa M, Inada M. Effects of steroid and thyroid hormones on synthesis of atrial natriuretic peptide by cultured atrial myocytes of rat. *Biochem Biophys Res Commun* 1987 May 29;145(1):336-43.
- Matsubara H, Hirata Y, Yoshimi H, Takata S, Takagi Y, Yamane Y, Umeda Y, Nishikawa M, Inada M.

Ventricular myocytes from neonatal rats are more responsive to dexamethasone than atrial myocytes in synthesis of atrial natriuretic peptide. *Biochem Biophys Res Commun* 1987 Nov 13;148(3):1030-8.

Momma K, Takao A. Increased constriction of the ductus arteriosus with combined administration of indomethacin and betamethasone in fetal rats. *Pediatr Res* 1989 Jan;25(1):69-75.

Navarro HA, Kudlacz EM, Slotkin TA. Control of adenylate cyclase activity in developing rat heart and liver: effects of prenatal exposure to terbutaline or dexamethasone. *Biol Neonate* 1991;60(2):127-36.

Slotkin TA, Seidler FJ, Kavlock RJ, Bartolome JV. Fetal dexamethasone exposure impairs cellular development in neonatal rat heart and kidney: effects on DNA and protein in whole tissues. *Teratology* 1991 Apr;43(4):301-6.

Stein HM, Oyama K, Martinez A, Chappell BA, Buhl E, Blount L, Padbury JF. Effects of corticosteroids in preterm sheep on adaptation and sympathoadrenal mechanisms at birth. *Am J Physiol* 1993 May;264(5 Pt 1):E763-9.

Tangalakis K, Lumbers ER, Moritz KM, Towstoles MK, Wintour EM. Effect of cortisol on blood pressure and vascular reactivity in the ovine fetus. *Exp Physiol* 1992 Sep;77(5):709-17.

Tsai MY, Brown DM. Effect of dexamethasone on fetal lung 15-hydroxy-prostaglandin dehydrogenase: possible mechanism for the prevention of patent ductus arteriosus by maternal dexamethasone therapy. *Prostaglandins Leukot Med* 1987 May;27(2-3):237-45.

Wood CE. Negative-feedback inhibition of fetal ACTH secretion by maternal cortisol. *Am J Physiol* 1987 Apr;252(4 Pt 2):R743-8.

Wood CE. Sensitivity of cortisol-induced inhibition of ACTH and renin in fetal sheep. *Am J Physiol* 1986 May;250(5 Pt 2):R795-802.

Wood CE, Cheung CY, Brace RA. Fetal heart rate, arterial pressure, and blood volume responses to cortisol infusion. *Am J Physiol* 1987 Dec;253(6 Pt 2):R904-9.

Central Nervous System Effects

Almazan G, Honegger P, Du Pasquier P, Matthieu JM. Dexamethasone stimulates the biochemical differentiation of fetal forebrain cells in reaggregating cultures. *Dev Neurosci* 1986;8(1):14-23.

Anderson DJ. Cell fate determination in the peripheral nervous system: the sympathoadrenal progenitor. *J Neurobiol* 1993 Feb;24(2):185-98.

Benesova O, Pavlik A. Perinatal treatment with glucocorticoids and the risk of maldevelopment of the brain. *Neuropharmacology* 1989 Jan;28(1):89-97.

Bian X, Seidler FJ, Slotkin TA. Fetal dexamethasone exposure interferes with establishment of cardiac noradrenergic innervation and sympathetic activity. *Teratology* 1993 Feb;47(2):109-17.

Bohn MC, Goldstein M, Black IB. Expression and development of phenylethanolamine N-methyltransferase (PNMT) in rat brain stem: studies with glucocorticoids. *Dev Biol* 1986 Mar;114(1):180-93.

Carlos RQ, Seidler FJ, Lappi SE, Slotkin TA. Fetal dexamethasone exposure affects basal ornithine decarboxylase activity in developing rat brain regions and alters acute responses to hypoxia and maternal separation. *Biol Neonate* 1991;59(2):69-77.

Carlos RQ, Seidler FJ, Slotkin TA. Fetal dexamethasone exposure alters macromolecular characteristics of rat brain development: a critical period for regionally selective alterations? *Teratology* 1992 Jul;46(1):45-59.

Carlos RQ, Seidler FJ, Slotkin TA. Fetal dexamethasone exposure sensitizes neonatal rat brain to hypoxia: effects on protein and DNA synthesis. *Brain Res Dev Brain Res* 1991 Dec 17;64(1-2):161-6.

Chumas PD, Del Bigio MR, Drake JM, Tuor UI. A comparison of the protective effect of dexamethasone to other potential prophylactic agents in a neonatal rat model of cerebral hypoxia-ischemia. *J Neurosurg* 1993 Sep;79(3):414-20.

Cintra A, Solfrini V, Bunnemann B, Okret S, Bortolotti F, Gustafsson JA, Fuxe K. Prenatal development of glucocorticoid receptor gene expression and immunoreactivity in the rat brain and pituitary gland: a combined in-situ hybridization and immunocytochemical analysis. *Neuroendocrinology* 1993 Jun;57(6):1133-47.

Cosi C, Spoerri PE, Comelli MC, Guidolin D, Skaper SD. Glucocorticoids depress activity-dependent

- expression of BDNF mRNA in hippocampal neurones. *Neuroreport* 1993 May;4(5):527-30.
- Dygalo NN. [Emotional reactivity of rats and of their progeny after hormonal modification of the intrauterine development]. *Zh Vyssh Nerv Deiat* 1988 Jul-Aug;38(4):710-4. (Rus).
- Dygalo NN, Milova AA, Shishkina GT. [The ontogeny of the alpha 2- and beta-adrenoreceptors in the brain following exposure to corticosterone during intrauterine development]. *Ontogenez* 1991 Nov-Dec;22(6):606-11. (Rus).
- Dygalo NN, Naumenko EV. [Hydrocortisone modification during intrauterine development of the activity of brain tyrosine hydroxylase in adult white rats]. *Ontogenez* 1988 May-Jun;19(3):319-22. (Rus).
- Dygalo NN, Shishkina GT, Milova AA. [The beta-adrenoreceptors of the cerebral cortex in rat pups after exposures altering the noradrenaline level]. *Ontogenez* 1993 May-Jun;24(3):93-7. (Rus).
- Fujii T, Horinaka M, Hata M. Functional effects of glucocorticoid exposure during fetal life. *Prog Neuropsychopharmacol Biol Psychiatry* 1993 Mar; 17(2):279-93.
- Garina IA, Zhukov DA, Rakitskaia VV, Shaliapina VG. Receptor binding of corticosterone in some rat brain structures following neonatal blockade of the hypophyseoadrenal system. *Neurosci Behav Physiol* 1986 Sep-Oct;16(5):448-51.
- Garina IA, Zhukov DA, Rakitskaia VV, Shaliapina VG. [Receptor binding of corticosterone in various structures of the rat brain after neonatal blockade of the hypophyseal-adrenal system]. *Probl Endokrinol (Mosk)* 1985 Jul-Aug;31(4):46-9. (Rus).
- Gudoshnikov VI, Fedotov VP. The heightened sensitivity of hypophyseal cells of neonatal rats to corticosteroids. *Neurosci Behav Physiol* 1993 Mar-Apr;23(2):107-11.
- Hill CE, McLennan IS, Hendry IA. Development of sympathetic neurones in vivo: an investigation of the possible role of glucocorticosteroids in regulating transmitter type. *Aust J Exp Biol Med Sci* 1985 Aug;63(Pt 4):439-49.
- Juanes MC, Arizmendi C, Medina JM. Attenuation of postnatal hypoxia in the premature newborn rat by maternal treatment with dexamethasone: its relationship with lung phospholipid content. *Biol Neonate* 1986;50(6):337-44.
- Navarro HA, Lachowicz J, Bartolome J, Whitmore WL, Slotkin TA. Effects of prenatal dexamethasone on development of ornithine decarboxylase activity in brain and peripheral tissues of rats. *Pediatr Res* 1988 Oct;24(4):465-9.
- Rodriguez MP, Sosenko IR, Antigua MC, Frank L. Prenatal hormone treatment with thyrotropin releasing hormone and with thyrotropin releasing hormone plus dexamethasone delays antioxidant enzyme maturation but does not inhibit a protective antioxidant enzyme response to hyperoxia in newborn rat lung. *Pediatr Res* 1991 Dec;30(6): 522-7.
- Scully JL, Otten U. Glucocorticoid modulation of neurotrophin expression in immortalized mouse hippocampal neurons. *Neurosci Lett* 1993 May 28; 155(1):11-4.
- Slotkin TA, Lappi SE, McCook EC, Tayyeb MI, Eylers JP, Seidler FJ. Glucocorticoids and the development of neuronal function: effects of prenatal dexamethasone exposure on central noradrenergic activity. *Biol Neonate* 1992;61(5): 326-36.
- Slotkin TA, Lappi SE, Tayyeb MI, Seidler FJ. Dose-dependent glucocorticoid effects on noradrenergic synaptogenesis in rat brain: ontogeny of [3H]desmethyylimipramine binding sites after fetal exposure to dexamethasone. *Res Commun Chem Pathol Pharmacol* 1991 Jul;73(1):3-19.
- Slotkin TA, McCook EC, Seidler FJ. Glucocorticoids regulate the development of intracellular signaling enhanced forebrain adenylate cyclase catalytic subunit activity after fetal dexamethasone exposure. *Brain Res Bull* 1993;32(4):359-64.
- Tuor UI, Simone CS, Arellano R, Tanswell K, Post M. Glucocorticoid prevention of neonatal hypoxic-ischemic damage: role of hyperglycemia and antioxidant enzymes. *Brain Res* 1993 Feb 26; 604(1-2):165-72.
- Tuor UI, Simone CS, Barks JD, Post M. Dexamethasone prevents cerebral infarction without affecting cerebral blood flow in neonatal rats. *Stroke* 1993 Mar;24(3):452-7.
- Uno H, Lohmiller L, Thieme C, Kemnitz JW, Engle MJ, Roecker EB, Farrell PM. Brain damage induced by prenatal exposure to dexamethasone in fetal rhesus macaques. I. Hippocampus. *Brain Res Dev Brain Res* 1990 May 1;53(2):157-67.
- Velazquez PN, Romano MC. Corticosterone therapy during gestation: effects on the development of rat cerebellum. *Int J Dev Neurosci* 1987;5(3):189-94.
- Zahalka EA, Seidler FJ, Slotkin TA. Dexamethasone treatment in utero enhances neonatal cholinergic nerve terminal development in rat brain. *Res Commun Chem Pathol Pharmacol* 1993 Aug;81(2): 191-8.

Combination Therapy

- Aneschi MM, Petrelli A, Zaccardo G, Barbatì A, Di Renzo GC, Cosmi EV, Hallman M. Inositol and glucocorticoid in the development of lung stability in male and female rabbit fetuses. *Pediatr Res* 1988 Nov;24(5):617-21.
- Barker PM, Markiewicz M, Parker KA, Walters DV, Strang LB. Synergistic action of triiodothyronine and hydrocortisone on epinephrine-induced reabsorption of fetal lung liquid. *Pediatr Res* 1990 Jun;27(6):588-91.
- Barker PM, Walters DV, Markiewicz M, Strang LB. Development of the lung liquid reabsorptive mechanism in fetal sheep: synergism of triiodothyronine and hydrocortisone. *J Physiol (Lond)* 1991 Feb;433:435-49.
- Devaskar U, Church JC, Chechani V, Sadiq F. Effect of simultaneous administration of betamethasone and triiodothyronine (T3) on the development of functional pulmonary maturation in fetal rabbit. *Biochem Biophys Res Commun* 1987 Jul 31;146(2):524-9.
- Devaskar SU, Grim PF 3d, Devaskar UP. A differential effect of thyroxine and glucocorticoids on fetal brain and heart insulin receptor. *Pediatr Res* 1985 Feb;19(2):192-8.
- Ekelund L, Enhörning G. Glucocorticoids and beta-adrenergic-receptor agonists: their combined effect on fetal rabbit lung surfactant. *Am J Obstet Gynecol* 1985 Aug 15;152(8):1063-7.
- EiKady T, Jobe A. Corticosteroids and surfactant increase lung volumes and decrease rupture pressures of preterm rabbit lungs. *J Appl Physiol* 1987 Oct;63(4):1616-21.
- EiKady T, Jobe A. Maternal treatments with corticosteroids and/or T3 change lung volumes and rupture pressures in preterm rabbits. *Biol Neonate* 1988;54(4):203-10.
- Gallaher KJ, Rannels DE, Rannels SR. Vitamin K-dependent carboxylase activity in fetal rat lung: developmental effects of dexamethasone and triiodothyronine. *Pediatr Res* 1989 May;25(5):530-4.
- Gladstone IM, Mercurio MR, Devenny SG, Jacobs HC. Antenatal steroids, postnatal surfactant, and pulmonary function in premature rabbits. *J Appl Physiol* 1989 Oct;67(4):1377-82.
- Hill MD, Abramson FP. The effect of phenobarbital and dexamethasone on hepatic cytochrome P-450 and alpha 1-acid glycoprotein in maternal and fetal guinea pigs. *Res Commun Chem Pathol Pharmacol* 1990 Jul;69(1):33-48.
- Ikegami M, Jobe AH, Pettenazzo A, Seidner SR, Berry DD, Ruffini L. Effects of maternal treatment with corticosteroids, T3, TRH, and their combinations on lung function of ventilated preterm rabbits with and without surfactant treatments. *Am Rev Respir Dis* 1987 Oct;136(4):892-8.
- Ikegami M, Jobe AH, Seidner S, Yamada T. Gestational effects of corticosteroids and surfactant in ventilated rabbits. *Pediatr Res* 1989 Jan;25(1):32-7.
- Ikegami M, Jobe AH, Tabor BL, Rider ED, Lewis JF. Lung albumin recovery in surfactant-treated preterm ventilated lambs. *Am Rev Respir Dis* 1992 May; 145(5):1005-8.
- Ikegami M, Polk D, Tabor B, Lewis J, Yamada T, Jobe A. Corticosteroid and thyrotropin-releasing hormone effects on preterm sheep lung function. *J Appl Physiol* 1991 May;70(5):2268-78.
- Karp WB, Robertson AF, Kanto WP Jr. The effect of hydrocortisone, thyroxine, and phenobarbital on diamine oxidase activity in newborn rat intestine. *Pediatr Res* 1987 Apr;21(4):368-70.
- Liggins GC, Schellenberg JC, Manzai M, Kitterman JA, Lee CC. Synergism of cortisol and thyrotropin-releasing hormone in lung maturation in fetal sheep. *J Appl Physiol* 1988 Oct;65(4):1880-4.
- Lohninger A, Krieglsteiner HP, Salzer H, Vytiska-Binstorfer E, Riedl W, Erhardt W. Studies on the effects of betamethasone, L-carnitine, and betamethasone-L-carnitine combinations on the dipalmitoyl phosphatidylcholine content and phosphatidylcholine species composition in foetal rat lungs. *J Clin Chem Clin Biochem* 1986 Jun; 24(6):361-8.
- O'Brodovich H, Canessa C, Ueda J, Rafii B, Rossier BC, Edelson J. Expression of the epithelial Na⁺ channel in the developing rat lung. *Am J Physiol* 1993 Aug;265(2 Pt 1):C491-6.
- Orlowski J, Lingrel JB. Thyroid and glucocorticoid hormones regulate the expression of multiple Na,K-ATPase genes in cultured neonatal rat cardiac myocytes. *J Biol Chem* 1990 Feb 25;265(6):3462-70.
- Oulton M, Rasmusson MG, Yoon RY, Fraser M. Gestation-dependent effects of the combined treatment of glucocorticoids and thyrotropin-releasing hormone on surfactant production by fetal rabbit lung. *Am J Obstet Gynecol* 1989 Apr;160(4):961-7.
- Polk D, Ikegami M, Jobe AH, Newnham J, Kelly R, Cohen R, Sly P. Combined antenatal thyroid hormone and betamethasone therapy and postnatal pulmonary function in the preterm lamb: effects of a single fetal im dose [abstract]. *Pediatr Res* 1993;33(4 Pt 2):341a.

Pope TS, Smart DA, Rooney SA. Hormonal effects on fatty-acid synthase in cultured fetal rat lung; induction by dexamethasone and inhibition of activity by triiodothyronine. *Biochim Biophys Acta* 1988 Mar 25;959(2):169-77.

Rodriguez MP, Sosenko IR, Antigua MC, Frank L. Prenatal hormone treatment with thyrotropin releasing hormone and with thyrotropin releasing hormone plus dexamethasone delays antioxidant enzyme maturation but does not inhibit a protective antioxidant enzyme response to hyperoxia in newborn rat lung. *Pediatr Res* 1991 Dec;30(6):522-7.

Rodriguez-Pierce M, Sosenko IR, Frank L. Prenatal thyroid releasing hormone and thyroid releasing hormone plus dexamethasone lessen the survival of newborn rats during prolonged high O₂ exposure. *Pediatr Res* 1992 Oct;32(4):407-11.

Rooney SA, Gobran LI, Chu AJ. Thyroid hormone opposes some glucocorticoid effects on glycogen content and lipid synthesis in developing fetal rat lung. *Pediatr Res* 1986 Jun;20(6):545-50.

Seidner S, Rider E, Jobe A, Yamada T, Ikegami M. Effects of antenatal thyrotropin-releasing hormone, antenatal corticosteroids, and postnatal ventilation on surfactant mobilization in premature rabbits. *Am J Obstet Gynecol* 1992 May;166(5):1551-9.

Tabor BL, Ikegami M, Jobe AH, Yamada T, Oetomo SB. Dose response of thyrotropin-releasing hormone on pulmonary maturation in corticosteroid-treated preterm rabbits. *Am J Obstet Gynecol* 1990 Aug;163(2):669-76.

Walther FJ, Ikegami M, Warburton D, Polk DH. Corticosteroids, thyrotropin-releasing hormone, and antioxidant enzymes in preterm lamb lungs. *Pediatr Res* 1991 Dec;30(6):518-21.

Warburton D, Parton L, Buckley S, Cosico L, Enns G, Saluna T. Combined effects of corticosteroid, thyroid hormones, and beta-agonist on surfactant, pulmonary mechanics, and beta-receptor binding in fetal lamb lung. *Pediatr Res* 1988 Aug;24(2):166-70.

Ward SM, Caritis SN, Chiao JP, Moore JJ. Dexamethasone effects on ritodrine-induced changes in myometrial contractility and beta-adrenergic receptor function. *Am J Obstet Gynecol* 1988 Dec;159(6):1461-6.

Endocrine Effects

Inczefi-Gonda A, Csaba G. Prolonged influence of a single neonatal steroid (dexamethasone) treatment on thymocytic steroid binding. *Exp Clin Endocrinol* 1985 Jun;85(3):358-60.

Rodriguez-Pierce M, Sosenko IR, Frank L. Prenatal thyroid releasing hormone and thyroid releasing hormone plus dexamethasone lessen the survival of newborn rats during prolonged high O₂ exposure. *Pediatr Res* 1992 Oct;32(4):407-11.

Wood CE. Negative-feedback inhibition of fetal ACTH secretion by maternal cortisol. *Am J Physiol* 1987 Apr;252(4 Pt 2):R743-8.

Wood CE. Sensitivity of cortisol-induced inhibition of ACTH and renin in fetal sheep. *Am J Physiol* 1986 May;250(5 Pt 2):R795-802.

Gastrointestinal Effects

- Barnard JA, Ghishan FK. Methylprednisolone accelerates the ontogeny of sodium-taurocholate cotransport in rat ileal brush border membranes. *J Lab Clin Med* 1986 Dec;108(6):549-55.
- Bate LA, Ireland W, Connell BJ, Grimmelt B. Development of the small intestine of piglets in response to prenatal elevation of glucocorticoids. *Histol Histopathol* 1991 Apr;6(2):207-16.
- Beck JC, Lipkowitz MS, Abramson RG. Ontogeny of sodium proton antiporter activity in rabbit renal brush border membrane vesicles. *J Clin Invest* 1991;87(6):2067-76.
- Bujanover Y, Amarri S, Lebenthal E, Petell JK. The effect of dexamethasone and glucagon on the expression of hepatocyte plasma membrane proteins during development. *Hepatology* 1988 Jul-Aug; 8(4):722-7.
- Burchell A, Leakey JE. Development of the rat hepatic microsomal glucose-6-phosphatase system and its glucocorticoid inducibility. *Biol Neonate* 1988;54(2):107-15.
- Engelhard EL, Beggs JC, Neu J. Maturation of antioxidant enzymes in rat small intestine: lack of glucocorticoid stimulation. *J Pediatr* 1987 Sep; 111(3):459-63.
- Franke H, Dargel R. Morphometric studies on lipoprotein particles in developing rat liver and their corticosteroid-induced changes during the late gestational period. *Cell Tissue Res* 1985;242(3): 661-7.
- Heitkemper MM, Marotta SF. Effects of corticosterone and metyrapone on gastrointestinal neurotransmitter enzyme activities. *Res Commun Chem Pathol Pharmacol* 1986 Oct;54(1):47-64.
- Hill MD, Abramson FP. The effect of phenobarbital and dexamethasone on hepatic cytochrome P-450 and alpha 1-acid glycoprotein in maternal and fetal guinea pigs. *Res Commun Chem Pathol Pharmacol* 1990 Jul;69(1):33-48.
- Horvath K, Blochin B, Hill I, Verma R, Lu RB, Lebenthal E. The pre- and postnatal development of Na⁺/K⁺-ATPase in gastrointestinal organs of the rat: effect of betamethasone treatment. *J Pediatr Gastroenterol Nutr* 1993 May;16(4):412-8.
- Huang DP, Cote GJ, Massari RJ, Chiu JF. Dexamethasone inhibits alpha-fetoprotein gene transcription in neonatal rat liver and isolated nuclei. *Nucleic Acids Res* 1985 Jun 11;13(11): 3873-90.
- Israel EJ, Schiffrin EJ, Carter EA, Frieberg E, Walker WA. Cortisone strengthens the intestinal mucosal barrier in a rodent necrotizing enterocolitis model. *Adv Exp Med Biol* 1991;310:375-80.
- Israel EJ, Schiffrin EJ, Carter EA, Frieberg E, Walker WA. Prevention of necrotizing enterocolitis in the rat with prenatal cortisone. *Gastroenterology* 1990; 99(5):1333-8.
- James PS, Smith MW, Tivey DR, Wilson TJ. Dexamethasone selectively increases sodium-dependent alanine transport across neonatal piglet intestine. *J Physiol (Lond)* 1987 Dec; 393:569-82.
- Johnston NE, Stewart JA. The effect of glucocorticoids and prematurity on absorption of colostral immunoglobulin in the calf. *Aust Vet J* 1986 Jun;63(6):191-2.
- Karp WB, Robertson AF, Kanto WP Jr. The effect of hydrocortisone, thyroxine, and phenobarbital on diamine oxidase activity in newborn rat intestine. *Pediatr Res* 1987 Apr;21(4):368-70.
- Leakey JE, Althaus ZR, Bailey JR, Slikker W Jr. Dexamethasone increases UDP-glucuronyltransferase activity towards bilirubin, oestradiol and testosterone in foetal liver from rhesus monkey during late gestation. *Biochem J* 1985 Jan 1;225(1):183-8.
- Lee PC, Struve MF, Werlin SL. Modulation of lingual lipase development by glucocorticoid in the rat. *Pediatr Res* 1991 Jan;29(1):46-9.
- Leung YK, Jirapinyo P, Lebenthal E, Lee PC. Effect of hydrocortisone on the maturation of cholecystokinin (CCK) binding and CCK stimulated amylase release in pancreatic acini of neonatal rats. *Pancreas* 1987;2(1):73-8.
- Li J, Saunders JC, Gilmour RS, Silver M, Fowden AL. Insulin-like growth factor-II messenger ribonucleic acid expression in fetal tissues of the sheep during late gestation: effects of cortisol. *Endocrinology* 1993 May;132(5):2083-9.
- Linder MW, Prough RA. Developmental aspects of glucocorticoid regulation of polycyclic aromatic hydrocarbon-inducible enzymes in rat liver. *Arch Biochem Biophys* 1993 Apr;302(1):92-102.
- Navarro HA, Kudlacz EM, Slotkin TA. Control of adenylate cyclase activity in developing rat heart and liver: effects of prenatal exposure to terbutaline or dexamethasone. *Biol Neonate* 1991;60(2): 127-36.
- Neu J, Ozaki CK, Angelides KJ. Glucocorticoid-mediated alteration of fluidity of brush border membrane in rat small intestine. *Pediatr Res* 1986 Jan;20(1):79-82.

- Nishida N, Takeuchi T. Effect of dexamethasone on the adenylate cyclase system of cultured hepatocytes of fetal rats. *Biol Neonate* 1987;52(1):33-9.
- Pang KY, Newman AP, Udall JN, Walker WA. Development of gastrointestinal mucosal barrier. VII. In utero maturation of microvillus surface by cortisone. *Am J Physiol* 1985 Jul;249(1 Pt 1):G85-91.
- Rudolph CD, Roman C, Rudolph AM. Effect of cortisol on hepatic gluconeogenesis in the fetal sheep. *J Dev Physiol* 1989 Apr;11(4):219-23.
- Wallin R, Hutson SM. Dexamethasone stimulates vitamin K-dependent carboxylase activity in neonatal rats and cultured fetal hepatocytes. *Pediatr Res* 1991 Sep;30(3):281-5.
- Yeoh GC, Brighton VJ, Angus DA, Kraemer M, Vassy J, Chalemeau MT. The effect of dexamethasone on albumin production by fetal rat hepatocytes in culture. *Eur J Cell Biol* 1985 Jul;38(1):157-64.

Pharmacology

- Akagi K, Berdusco ET, Challis JR. Cortisol inhibits ACTH but not the AVP response to hypoxaemia in fetal lambs at days 123-128 of gestation. *J Dev Physiol* 1990 Dec;14(6):319-24.
- Althaus ZR, Bailey JR, Leakey JE, Slikker W Jr. Transplacental metabolism of dexamethasone and cortisol in the late gestational age rhesus monkey (*Macaca mulatta*). *Dev Pharmacol Ther* 1986;9(5):332-49.
- Antolovich GC, McMillen IC, Robinson PM, Silver M, Young IR, Perry RA. Effect of cortisol infusion on the pituitary-adrenal axis of the hypothalamo-pituitary-disconnected fetal sheep. *Neuroendocrinology* 1992 Sep;56(3):312-9.
- Aszterbaum M, Feingold KR, Menon GK, Williams ML. Glucocorticoids accelerate fetal maturation of the epidermal permeability barrier in the rat. *J Clin Invest* 1993 Jun;91(6):2703-8.
- Bocking AD, McMillen IC, Harding R, Thorburn GD. Effect of reduced uterine blood flow on fetal and maternal cortisol. *J Dev Physiol* 1986 Aug;8(4):237-45.
- Cabello G, Wrutniak C. Pituitary-thyroid axis sensitivity and neonatal changes in plasma iodothyronine, thyreostimulin and cortisol levels in the preterm lamb: comparison of two experimental models. *J Dev Physiol* 1989 Jul;12(1):15-9.
- Coulter CL, Martin MC, Voytek CC, Hofmann JI, Jaffe RB. Response to hemorrhagic stress in the rhesus monkey fetus in utero: effects on the pituitary-adrenal axis. *J Clin Endocrinol Metab* 1993 May;76(5):1234-40.
- Dalle M, Pradier P, Delost P. The regulation of glucocorticosteroid secretion during the perinatal period. *Reprod Nutr Dev* 1985;25(5):977-91.
- Darbeida H, Naaman E, Durand P. Glucocorticoid induction of the maturation of ovine fetal adrenocortical cells. *Biochem Biophys Res Commun* 1987 Jun 30;145(3):999-1005.
- Devaskar SU, Grim PF 3d, Devaskar UP. A differential effect of thyroxine and glucocorticoids on fetal brain and heart insulin receptor. *Pediatr Res* 1985 Feb;19(2):192-8.
- Fowden AL, Comline RS, Silver M. The effects of cortisol on the concentration of glycogen in different tissues in the chronically catheterized fetal pig. *Q J Exp Physiol* 1985 Jan;70(1):23-35.
- Fraser M, Liggins GC. The effect of cortisol on thyroid hormone kinetics in the ovine fetus. *J Dev Physiol* 1989 Apr;11(4):207-11.

- Geevarghese SK, Chytil F. Dexamethasone enhances perinatal pulmonary maturation in fetal rats via manipulation of retinoids [abstract]. *Pediatr Res* 1993;33(4 Pt 2):302a.
- Graf R, Gossrau R, Frank HG. Placental toxicity in rats after administration of synthetic glucocorticoids. A morphological, histochemical and immunohistochemical investigation. *Anat Embryol (Berl)* 1989;180(2):121-30.
- Hargrave BY, Rose JC. By 95 days of gestation CRF increases plasma ACTH and cortisol in ovine fetuses. *Am J Physiol* 1986 Apr;250(4 Pt 1):E422-7.
- Harvey LM, Gilbert RD, Longo LD, Ducsay CA. Changes in ovine fetal adrenocortical responsiveness after long-term hypoxemia. *Am J Physiol* 1993 May;264(5 Pt 1):E741-7.
- Heller CL, Weisenberg LS, Ortgi E, De Nicola AF. Steps of glucocorticoid action in normal and diabetic rat placenta. *J Steroid Biochem* 1988 Jul;31(1):119-23.
- Hill CE, McLennan IS, Hendry IA. Development of sympathetic neurones in vivo: an investigation of the possible role of glucocorticosteroids in regulating transmitter type. *Aust J Exp Biol Med Sci* 1985 Aug;63(Pt 4):439-49.
- Inczeffi-Gonda A, Csaba G. Prolonged influence of a single neonatal steroid (dexamethasone) treatment on thymocytic steroid binding. *Exp Clin Endocrinol* 1985 Jun;85(3):358-60.
- Jefferies AL. Effect of hormones on clearance of fetal lung liquid after birth in preterm rabbits [abstract]. *Pediatr Res* 1993;33(4 Pt 2):330a.
- Klepac R. Effect of dexamethasone on glycogen deposition in pregnant rats and their fetuses. *Exp Clin Endocrinol* 1985 Dec;86(3):305-9.
- Leeper LL, Schroeder R, Henning SJ. Kinetics of circulating corticosterone in infant rats. *Pediatr Res* 1988 Nov;24(5):595-9.
- Leung P, Gidari AS. Effect of dexamethasone on fetal liver erythroid colony-forming cells in vivo. *Exp Hematol* 1985 Oct;13(9):906-11.
- Li J, Saunders JC, Gilmour RS, Silver M, Fowden AL. Insulin-like growth factor-II messenger ribonucleic acid expression in fetal tissues of the sheep during late gestation: effects of cortisol. *Endocrinology* 1993 May;132(5):2083-9.
- Linder MW, Prough RA. Developmental aspects of glucocorticoid regulation of polycyclic aromatic hydrocarbon-inducible enzymes in rat liver. *Arch Biochem Biophys* 1993 Apr;302(1):92-102.
- Lund J, Faucher DJ, Ford SP, Porter JC, Waterman MR, Mason JI. Developmental expression of bovine adrenocortical steroid hydroxylases. Regulation of P-450(17 alpha) expression leads to episodic fetal cortisol production. *J Biol Chem* 1988 Nov 5;263(31):16195-201.
- McCoy SJ, Shirley BA. Effects of prenatal administration of testosterone and cortisone on the reproductive system of the female rat. *Life Sci* 1992;50(9):621-8.
- Momma K, Takao A. Increased constriction of the ductus arteriosus with combined administration of indomethacin and betamethasone in fetal rats. *Pediatr Res* 1989 Jan;25(1):69-75.
- Nagel MD, Nagel J. Development of erythroid colony-forming cells in rat fetal spleen: apparent lack of sensitivity to an in vivo corticosteroid excess as compared to fetal liver. *Development* 1987 Feb;99(2):239-46.
- Nichols KV, Floros J, Dynia DW, Veletzka SV, Wilson CM, Gross I. Regulation of surfactant protein A mRNA by hormones and butyrate in cultured fetal rat lung. *Am J Physiol* 1990 Dec;259(6 Pt 1):L488-95.
- Oberg KC, Carpenter G. Dexamethasone acts as a negative regulator of epidermal growth factor receptor synthesis in fetal rat lung cells. *Mol Endocrinol* 1989 Jun;3(6):915-22.
- Pepe GJ, Albrecht ED. Fetal regulation of transplacental cortisol-cortisone metabolism in the baboon. *Endocrinology* 1987;120(6):2529-33.
- Pepe GJ, Waddell BJ, Stahl SJ, Albrecht ED. The regulation of transplacental cortisol-cortisone metabolism by estrogen in pregnant baboons. *Endocrinology* 1988 Jan;122(1):78-83.
- Pope TS, Smart DA, Rooney SA. Hormonal effects on fatty-acid synthase in cultured fetal rat lung; induction by dexamethasone and inhibition of activity by triiodothyronine. *Biochim Biophys Acta* 1988 Mar 25;959(2):169-77.
- Randhawa P, Hass M, Frank L, Massaro D. Dexamethasone increases superoxide dismutase activity in serum-free rat fetal lung organ cultures. *Pediatr Res* 1986 Sep;20(9):895-8.
- Rider ED, Jobe AH, Ikegami M, Yamada T, Seidner S. Antenatal betamethasone dose effects in preterm rabbits studied at 27 days gestation. *J Appl Physiol* 1990 Mar;68(3):1134-41.
- Rooney SA, Smart DA, Weinhold PA, Feldman DA. Dexamethasone increases the activity but not the amount of choline-phosphate cytidyltransferase in fetal rat lung. *Biochim Biophys Acta* 1990 Jun 14;1044(3):385-9.

- Rudolph CD, Roman C, Rudolph AM. Effect of cortisol on hepatic gluconeogenesis in the fetal sheep. *J Dev Physiol* 1989 Apr;11(4):219-23.
- Shishkina GT. [The sexual system of fetal and adult male rats of 2 strains after prenatal exposure to glucocorticoids]. *Ontogenez* 1990 Jan-Feb;21(1):76-80. (Rus).
- Shishkina GT, Bykova TS. [The postnatal development of the genital system in male rats following the prenatal administration of corticosterone]. *Ontogenez* 1989 Jul-Aug;20(4): 431-4. (Rus).
- Shishkina GT, Dygalo NN, Iudin NS, Borodin PM, Naumenko EV. [The prenatal genotype-dependent modification by glucocorticoids of the morphometric characteristics of the genital system in mice and rats]. *Zh Obshch Biol* 1990 May-Jun; 51(3):412-8. (Rus).
- Tabor BL, Rider ED, Ikegami M, Jobe AH, Lewis JF. Dose effects of antenatal corticosteroids for induction of lung maturation in preterm rabbits. *Am J Obstet Gynecol* 1991 Feb;164(2):675-81.

Pulmonary Effects

- Adamson IY, King GM. Epithelial-interstitial cell interactions in fetal rat lung development accelerated by steroids. *Lab Invest* 1986 Aug; 55(2):145-52.
- Adamson IY, King GM. Postnatal development of rat lung following retarded fetal lung growth. *Pediatr Pulmonol* 1988;4(4):230-6.
- Anceschi MM, Petrelli A, Zaccardo G, Barbati A, Di Renzo GC, Cosmi EV, Hallman M. Inositol and glucocorticoid in the development of lung stability in male and female rabbit fetuses. *Pediatr Res* 1988 Nov;24(5):617-21.
- Asayama K, Hayashibe H, Dobashi K, Uchida N, Kato K. Effect of dexamethasone on antioxidant enzymes in fetal rat lungs and kidneys. *Biol Neonate* 1992;62(2-3):136-44.
- Austin SD, Polk DH, Jobe AH, Ikegami M. Dose response of fetal betamethasone therapy for surfactant protein mRNA expression in preterm lambs. *Pediatr Res* 1993;33(4 Pt 2):316a.
- Ballard PL. Glucocorticoid regulation of lung maturation. *Mead Johnson Symp Perinat Dev Med* 1987;(30):22-7.
- Ballard PL. Hormonal regulation of pulmonary surfactant. *Endocr Rev* 1989 May;10(2):165-81.
- Ballard PL. Hormones and lung maturation. *Monogr Endocrinol* 1986;28:1-354.
- Barker PM, Markiewicz M, Parker KA, Walters DV, Strang LB. Synergistic action of triiodothyronine and hydrocortisone on epinephrine-induced reabsorption of fetal lung liquid. *Pediatr Res* 1990 Jun;27(6):588-91.
- Barker PM, Walters DV, Markiewicz M, Strang LB. Development of the lung liquid reabsorptive mechanism in fetal sheep: synergism of triiodothyronine and hydrocortisone. *J Physiol (Lond)* 1991 Feb;433:435-49.
- Boggaram V, Mendelson CR. Transcriptional regulation of the gene encoding the major surfactant protein (SP-A) in rabbit fetal lung. *J Biol Chem* 1988 Dec 15;263(35):19060-5.
- Boshier DP, Holloway H, Liggins GC, Marshall RJ. Morphometric analyses of the effects of thyrotrophin releasing hormone and cortisol on the lungs of fetal sheep. *J Dev Physiol* 1989 Jul; 12(1):49-54.
- Clorch LB, Iqbal J, Massaro D. Perinatal rat lung catalase gene expression: influence of corticosteroid and hyperoxia. *Am J Physiol* 1991 Jun;260(6 Pt 1):L428-33.

- Connelly IH, Hammond GL, Harding PG, Possmayer F. Levels of surfactant-associated protein messenger ribonucleic acids in rabbit lung during perinatal development and after hormonal treatment. *Endocrinology* 1991 Nov;129(5):2583-91.
- Cott GR, Rao AK. Hydrocortisone promotes the maturation of Na(+)-dependent ion transport across the fetal pulmonary epithelium. *Am J Respir Cell Mol Biol* 1993 Aug;9(2):166-71.
- Davis JM, Whitin J. Prophylactic effects of dexamethasone in lung injury caused by hyperoxia and hyperventilation. *J Appl Physiol* 1992 Apr;72(4):1320-5.
- Dayer AM, Kapanci Y, Rademakers A, Rusy LM, De Mey J, Will JA. Increased numbers of neuroepithelial bodies (NEB) in lungs of fetal rhesus monkeys following maternal dexamethasone treatment. *Cell Tissue Res* 1985;239(3):703-5.
- Devaskar U, Church JC, Chechani V, Sadiq F. Effect of simultaneous administration of betamethasone and triiodothyronine (T3) on the development of functional pulmonary maturation in fetal rabbit. *Biochem Biophys Res Commun* 1987 Jul 31;146(2):524-9.
- Ekelund L, Enhorning G. Glucocorticoids and beta-adrenergic-receptor agonists: their combined effect on fetal rabbit lung surfactant. *Am J Obstet Gynecol* 1985 Aug 15;152(8):1063-7.
- ElKady T, Jobe A. Corticosteroids and surfactant increase lung volumes and decrease rupture pressures of preterm rabbit lungs. *J Appl Physiol* 1987 Oct;63(4):1616-21.
- ElKady T, Jobe A. Maternal treatments with corticosteroids and/or T3 change lung volumes and rupture pressures in preterm rabbits. *Biol Neonate* 1988;54(4):203-10.
- Fiascone JM, Jacobs HC, Moya FR, Mercurio MR, Lima DM. Betamethasone increases pulmonary compliance in part by surfactant-independent mechanisms in preterm rabbits. *Pediatr Res* 1987 Dec;22(6):730-5.
- Fiascone JM, Mercurio MR, Lima DM, Jacobs HC. Corticosteroids and intratracheal surfactant both alter the distribution between the airways and lung tissue of intratracheally administered radiolabeled phosphatidylcholine in the preterm rabbit. *Exp Lung Res* 1990 Jul-Aug;16(4):311-21.
- Fisher JH, McCormack F, Park SS, Stelzner T, Shannon JM, Hofmann T. In vivo regulation of surfactant proteins by glucocorticoids. *Am J Respir Cell Mol Biol* 1991 Jul;5(1):63-70.
- Floros J. Sixty years of surfactant research. *Am J Physiol* 1990 Apr;258(4 Pt 1):L238-40.
- Floros J, Gross I, Nichols KV, Veletza SV, Dynia D, Lu HW, Wilson CM, Peterec SM. Hormonal effects on the surfactant protein B (SP-B) mRNA in cultured fetal rat lung. *Am J Respir Cell Mol Biol* 1991 May;4(5):449-54.
- Floros J, Phelps DS, Smith BT. 2-dimensional gel electrophoretic of dexamethasone-induced organ-specific developmental proteins FSA FSB in rat lung fibroblasts. *Electrophoresis* 1985;6(5):238-41.
- Frank L. Prenatal dexamethasone treatment improves survival of newborn rats during prolonged high O2 exposure. *Pediatr Res* 1992 Aug;32(2):215-21.
- Frank L, Lewis PL, Sosenko IR. Dexamethasone stimulation of fetal rat lung antioxidant enzyme activity in parallel with surfactant stimulation. *Pediatrics* 1985 Mar;75(3):569-74.
- Fraser M, Liggins GC. The effect of cortisol on thyroid hormone kinetics in the ovine fetus. *J Dev Physiol* 1989 Apr;11(4):207-11.
- Fraslon C, Batenburg JJ. Pre-translational regulation of lipid synthesizing enzymes and surfactant proteins in fetal rat lung in explant culture. *FEBS Lett* 1993 Jul 5;325(3):285-90.
- Fraslon C, Lacaze-Masmonteil T, Zupan V, Chailley-Heu B, Bourbon JR. Fetal rat lung type II cell differentiation in serum-free isolated cell culture: modulation and inhibition. *Am J Physiol* 1993 May;264(5 Pt 1):L504-16.
- Gallaher KJ, Rannels DE, Rannels SR. Vitamin K-dependent carboxylase activity in fetal rat lung: developmental effects of dexamethasone and triiodothyronine. *Pediatr Res* 1989 May;25(5):530-4.
- Geevarghese SK, Chytil F. Dexamethasone enhances perinatal pulmonary maturation in fetal rats via manipulation of retinoids [abstract]. *Pediatr Res* 1993;33(4 Pt 2):302a.
- Gewolb IH, Warshaw JB. Fetal and maternal corticosterone and corticosteroid binding globulin in the diabetic rat gestation. *Pediatr Res* 1986 Feb;20(2):155-60.
- Gladstone IM, Mercurio MR, Devenny SG, Jacobs HC. Antenatal steroids, postnatal surfactant, and pulmonary function in premature rabbits. *J Appl Physiol* 1989 Oct;67(4):1377-82.
- Gross I, Wilson CM, Floros J, Dynia DW. Initiation of fetal rat lung phospholipid and surfactant-associated protein A mRNA synthesis. *Pediatr Res* 1989 Mar;25(3):239-44.
- Hallman M, Teramo K, Sipinen S, Raivio K. Effects of betamethasone and ritodrine on the fetal secretion of lung surfactant. *J Perinat Med* 1985;13(1):23-9.

- Honig LS, Smith BT, Slavkin HC, Donahue HG. Influence of the major histocompatibility complex h-2 on glucocorticoid-stimulated pulmonary surfactant synthesis in 2 congenic mouse strains. *Proc Soc Exp Biol Med* 1984;176(4):419-25.
- Iannuzzi DM, Ertsey R, Ballard PL. Biphasic glucocorticoid regulation of pulmonary SP-A: characterization of inhibitory process. *Am J Physiol* 1993 Mar;264(3 Pt 1):L236-44.
- Ikegami M, Berry D, elKady T, Pettenazzo A, Seidner S, Jobe A. Corticosteroids and surfactant change lung function and protein leaks in the lungs of ventilated premature rabbits. *J Clin Invest* 1987 May;79(5):1371-8.
- Ikegami M, Jobe A, Pettenazzo A, Seidner S. Effect of maternal hormone treatment on lung protein leakage and lung function of preterm newborn rabbits. *Eur Respir J Suppl* 1989 Mar;3:16s-20s.
- Ikegami M, Jobe AH, Pettenazzo A, Seidner SR, Berry DD, Ruffini L. Effects of maternal treatment with corticosteroids, T3, TRH, and their combinations on lung function of ventilated preterm rabbits with and without surfactant treatments. *Am Rev Respir Dis* 1987 Oct;136(4):892-8.
- Ikegami M, Jobe AH, Seidner S, Yamada T. Gestational effects of corticosteroids and surfactant in ventilated rabbits. *Pediatr Res* 1989 Jan;25(1):32-7.
- Ikegami M, Jobe AH, Tabor BL, Rider ED, Lewis JF. Lung albumin recovery in surfactant-treated preterm ventilated lambs. *Am Rev Respir Dis* 1992 May;145(5):1005-8.
- Ikegami M, Polk D, Tabor B, Lewis J, Yamada T, Jobe A. Corticosteroid and thyrotropin-releasing hormone effects on preterm sheep lung function. *J Appl Physiol* 1991 May;70(5):2268-78.
- Jefferies AL. Effect of hormones on clearance of fetal lung liquid after birth in preterm rabbits [abstract]. *Pediatr Res* 1993;33(4 Pt 2):330a.
- Johnson JW, Mitzner W, Beck JC, London WT, Sly DL, Lee PA, Khouzami VA, Cavalieri RL. Long-term effects of betamethasone on fetal development. *Am J Obstet Gynecol* 1981 Dec 15; 141(8):1053-64.
- Juanes MC, Arizmendi C, Medina JM. Attenuation of postnatal hypoxia in the premature newborn rat by maternal treatment with dexamethasone: its relationship with lung phospholipid content. *Biol Neonate* 1986;50(6):337-44.
- Keeney SE, Mathews MJ, Rassin DK. Antioxidant enzyme responses to hyperoxia in preterm and term rats after prenatal dexamethasone administration. *Pediatr Res* 1993 Feb;33(2):177-80.
- Kendall JZ, Lakritz J, Plopper CG, Richards GE, Randall GC, Nagamani M, Weir AJ. The effects of hydrocortisone on lung structure in fetal lambs. *J Dev Physiol* 1990 Mar;13(3):165-72.
- Kotas RV, Avery ME. Accelerated appearance of pulmonary surfactant in the fetal rabbit. *J Appl Physiol* 1971 Mar;30(3):358-61.
- Kotas RV, Mims LC, Hart LK. Reversible inhibition of lung cell number after glucocorticoid injection into fetal rabbits to enhance surfactant appearance. *Pediatrics* 1974 Mar;53(3):358-61.
- Kresch MJ, Gross I. The biochemistry of fetal lung development. *Clin Perinatol* 1987 Sep;14(3):481-507.
- Kudlacz EM, Navarro HA, Kavlock RJ, Slotkin TA. Regulation of postnatal beta-adrenergic receptor/adenylate cyclase development by prenatal agonist stimulation and steroids: alterations in rat kidney and lung after exposure to terbutaline or dexamethasone. *J Dev Physiol* 1990 Nov;14(5):273-81.
- Kudlacz EM, Navarro HA, Slotkin TA. Phosphatidic acid phosphatase in neonatal rat lung: effects of prenatal dexamethasone or terbutaline treatment on basal activity and on responsiveness to beta adrenergic stimulation. *J Pharmacol Exp Ther* 1989 Jul;250(1):236-40.
- Kudlacz EM, Slotkin TA. Regulation of neonatal rat lung compliance by beta-adrenergic receptor stimulation: effects of prenatal exposure to terbutaline or dexamethasone. *J Dev Physiol* 1990 Dec;14(6):307-10.
- Liggins GC. Premature delivery of foetal lambs infused with glucocorticoids. *J Endocrinol* 1969 Dec;45(4):515-23.
- Liggins GC, Schellenberg JC, Manzai M, Kitterman JA, Lee CC. Synergism of cortisol and thyrotropin-releasing hormone in lung maturation in fetal sheep. *J Appl Physiol* 1988 Oct;65(4):1880-4.
- Lohninger A, Krieglsteiner HP, Salzer H, Erhardt E, Kaiser E. Role of L carnitine in perinatal metabolism and effects of L carnitine administration on dipalmitoyl phosphatidylcholine content in fetal rat lungs and human amniotic fluid. In: Kaiser E, Lohninger A, editors. *Carnitine: its role in lung and heart disorders. Satellite symposium, Central European Congress for Anesthesiology; 1985 Sep 13; Graz, Austria.* New York: S. Karger; 1987. p. 66-99.
- Lohninger A, Krieglsteiner HP, Salzer H, Vytiska-Binstorfer E, Riedl W, Erhardt W. Studies on the effects of betamethasone, L-carnitine, and betamethasone-L-carnitine combinations on the dipalmitoyl phosphatidylcholine content and phosphatidylcholine species composition in foetal rat

- lungs. *J Clin Chem Clin Biochem* 1986 Jun; 24(6):361-8.
- Lortie C, King GM, Adamson IY. Effects of dexamethasone on macrophages in fetal and neonatal rat lung. *Pediatr Pulmonol* 1990; 8(3):138-44.
- Maniscalco WM, Finkelstein JN, Parkhurst AB. Dexamethasone increases de novo fatty acid synthesis in fetal rabbit lung explants. *Pediatr Res* 1985 Dec;19(12):1272-7.
- Massaro GD, Massaro D. Formation of alveoli in rats: postnatal effect of prenatal dexamethasone. *Am J Physiol* 1992 Jul;263(1 Pt 1):L37-41. Published errata appear in *Am J Physiol* 1992 Sep;263(3 Pt 1) and 1993 Feb;264(2 Pt 1):section L following table of contents.
- Mendelson CR, Chen C, Boggaram V, Zacharias C, Snyder JM. Regulation of the synthesis of the major surfactant apoprotein in fetal rabbit lung tissue. *J Biol Chem* 1986 Jul 25;261(21):9938-43.
- Mendelson CR, Snyder JM. Effect of cortisol on the synthesis of lamellar body glycerophospholipids in fetal rabbit lung tissue in vitro. *Biochim Biophys Acta* 1985 Mar 27;834(1):85-94.
- Navarro HA, Kudlacz EM, Eylers JP, Slotkin TA. Prenatal dexamethasone administration disrupts the pattern of cellular development in rat lung. *Teratology* 1989 Nov;40(5):433-8.
- Nichols KV, Floros J, Dynia DW, Veletza SV, Wilson CM, Gross I. Regulation of surfactant protein A mRNA by hormones and butyrate in cultured fetal rat lung. *Am J Physiol* 1990 Dec;259(6 Pt 1):L488-95.
- Nielsen HC. The development of surfactant synthesis in fetal rabbit lung organ culture exhibits a sex dimorphism. *Biochim Biophys Acta* 1986 Sep 4; 883(2):373-9.
- Nielsen HC, Torday JS. Sex differences in avian embryo pulmonary surfactant production: evidence for sex chromosome involvement. *Endocrinology* 1985 Jul;117(1):31-7.
- O'Brodovich H, Canessa C, Ueda J, Rafii B, Rossier BC, Edelson J. Expression of the epithelial Na⁺ channel in the developing rat lung. *Am J Physiol* 1993 Aug;265(2 Pt 1):C491-6.
- Oberg KC, Carpenter G. Dexamethasone acts as a negative regulator of epidermal growth factor receptor synthesis in fetal rat lung cells. *Mol Endocrinol* 1989 Jun;3(6):915-22.
- Ogasawara Y, Kuroki Y, Tsuzuki A, Ueda S, Misaki H, Akino T. Pre- and postnatal stimulation of pulmonary surfactant protein D by in vivo dexamethasone treatment of rats. *Life Sci* 1992;50(23):1761-7.
- Orlowski J, Lingrel JB. Thyroid and glucocorticoid hormones regulate the expression of multiple Na,K-ATPase genes in cultured neonatal rat cardiac myocytes. *J Biol Chem* 1990 Feb 25;265(6):3462-70.
- Oulton M, Rasmusson MG, Yoon RY, Fraser M. Gestation-dependent effects of the combined treatment of glucocorticoids and thyrotropin-releasing hormone on surfactant production by fetal rabbit lung. *Am J Obstet Gynecol* 1989 Apr; 160(4):961-7.
- Patterson CE, Davis KS, Beckman DE, Rhoades RA. Fatty acid synthesis in the fetal lung: relationship to surfactant lipids. *Biochim Biophys Acta* 1986 Aug 14;878(1):110-26.
- Phelps DS, Floros J. Dexamethasone in vivo raises surfactant protein B mRNA in alveolar and bronchiolar epithelium. *Am J Physiol* 1991 Feb; 260(2 Pt 1):L146-52.
- Polk D, Ikegami M, Jobe AH, Newnham J, Kelly R, Cohen R, Sly P. Combined antenatal thyroid hormone and betamethasone therapy and postnatal pulmonary function in the preterm lamb: effects of a single fetal im dose [abstract]. *Pediatr Res* 1993;33(4 Pt 2):341a.
- Post M. Maternal administration of dexamethasone stimulates choline-phosphate cytidyltransferase in fetal type II cells. *Biochem J* 1987 Jan 1;241(1):291-6.
- Post M, Barsoumian A, Smith BT. The cellular mechanism of glucocorticoid acceleration of fetal lung maturation. Fibroblast-pneumonocyte factor stimulates choline-phosphate cytidyltransferase activity. *J Biol Chem* 1986 Feb 15;261(5):2179-84.
- Randhawa P, Hass M, Frank L, Massaro D. Dexamethasone increases superoxide dismutase activity in serum-free rat fetal lung organ cultures. *Pediatr Res* 1986 Sep;20(9):895-8.
- Rider ED, Jobe AH, Ikegami M, Yamada T, Seidner S. Antenatal betamethasone dose effects in preterm rabbits studied at 27 days gestation. *J Appl Physiol* 1990 Mar;68(3):1134-41.
- Robert MF, Bator AT, Tausch HW Jr. Pulmonary pressure-volume relationships after corticotropin (ACTH) and saline injections in fetal rabbits. *Pediatr Res* 1975 Oct;9(10):760-2.
- Roberts JM, Jacobs MM, Cheng JB, Barnes PJ, O'Brien AT, Ballard PJ. Fetal pulmonary beta-adrenergic receptors: characterization in the human and in vitro modulation by glucocorticoids in the rabbit. *Pediatr Pulmonol* 1985 May-Jun;1(3 Suppl):S69-76.

- Rooney SA, Gobran L, Gross I, Wai-lee TS, Nardone LL, Motoyama EK. Studies on pulmonary surfactant. Effects of cortisol administration to fetal rabbits on lung phospholipid content, composition and biosynthesis. *Biochim Biophys Acta* 1976 Nov 19;450(2):121-30.
- Rooney SA, Gobran LI, Chu AJ. Thyroid hormone opposes some glucocorticoid effects on glycogen content and lipid synthesis in developing fetal rat lung. *Pediatr Res* 1986 Jun;20(6):545-50.
- Rooney SA, Gobran LI, Marino PA, Maniscalco WM, Gross I. Effects of betamethasone on phospholipid content, composition and biosynthesis in the fetal rabbit lung. *Biochim Biophys Acta* 1979 Jan 29; 572(1):64-76.
- Rooney SA, Smart DA, Weinhold PA, Feldman DA. Dexamethasone increases the activity but not the amount of choline-phosphate cytidyltransferase in fetal rat lung. *Biochim Biophys Acta* 1990 Jun 14; 1044(3):385-9.
- Schellenberg JC, Liggins GC, Stewart AW. Growth, elastin concentration, and collagen concentration of perinatal rat lung: effects of dexamethasone. *Pediatr Res* 1987 Jun;21(6):603-7.
- Schellhase DE, Shannon JM. Effects of maternal dexamethasone on expression of SP-A, SP-B, and SP-C in the fetal rat lung. *Am J Respir Cell Mol Biol* 1991 Apr;4(4):304-12.
- Seidner S, Pettenazzo A, Ikegami M, Jobe A. Corticosteroid potentiation of surfactant dose response in preterm rabbits. *J Appl Physiol* 1988 Jun;64(6):2366-71.
- Seidner S, Rider E, Jobe A, Yamada T, Ikegami M. Effects of antenatal thyrotropin-releasing hormone, antenatal corticosteroids, and postnatal ventilation on surfactant mobilization in premature rabbits. *Am J Obstet Gynecol* 1992 May;166(5):1551-9.
- Shimizu H, Miyamura K, Kuroki Y. Appearance of surfactant proteins, SP-A and SP-B, in developing rat lung and the effects of in vivo dexamethasone treatment. *Biochim Biophys Acta* 1991 Jan 4; 1081(1):53-60.
- Skinner SJ, Lowe C, Ashby CJ, Liggins GC. Effects of corticosteroids, prostaglandin E2, and beta-agonists on adenylate cyclase activity in fetal rat lung fibroblasts and type II epithelial cells. *Exp Lung Res* 1989 May;15(3):335-43. Comment in: *Exp Lung Res* 1989 May;15(3):331-4.
- Skinner SJ, Post M, Torday JS, Stiles AD, Smith BT. Characterization of proteoglycans synthesized by fetal rat lung type II pneumonocytes in vitro and the effects of cortisol. *Exp Lung Res* 1987;12(3): 253-64.
- Snyder JM, Rodgers HF, O'Brien JA, Mahli N, Magliato SA, Durham PL. Glucocorticoid effects on rabbit fetal lung maturation in vivo: an ultrastructural morphometric study. *Anat Rec* 1992 Jan;232(1):133-40.
- Sosenko IR, Frank L. Thyroid hormone depresses antioxidant enzyme maturation in fetal rat lung. *Am J Physiol* 1987 Oct;253(4 Pt 2):R592-8.
- Torday JS, Zinman HM, Nielsen HC. Glucocorticoid regulation of DNA, protein and surfactant phospholipid in developing lung. Temporal relationship between growth and differentiation. *Dev Pharmacol Ther* 1986;9(2):125-31.
- Veletza SV, Nichols KV, Gross I, Lu H, Dynia DW, Floros J. Surfactant protein C: hormonal control of SP-C mRNA levels in vitro. *Am J Physiol* 1992 Jun;262(6 Pt 1):L684-7.
- Venkatesh VC, Iannuzzi DM, Ertsey R, Ballard PL. Differential glucocorticoid regulation of the pulmonary hydrophobic surfactant proteins SP-B and SP-C. *Am J Respir Cell Mol Biol* 1993 Feb; 8(2):222-8.
- Walther FJ, Ikegami M, Warburton D, Polk DH. Corticosteroids, thyrotropin-releasing hormone, and antioxidant enzymes in preterm lamb lungs. *Pediatr Res* 1991 Dec;30(6):518-21.
- Warburton D, Parton L, Buckley S, Cosico L, Enns G, Saluna T. Combined effects of corticosteroid, thyroid hormones, and beta-agonist on surfactant, pulmonary mechanics, and beta-receptor binding in fetal lamb lung. *Pediatr Res* 1988 Aug;24(2): 166-70.
- Ward JA, Erenberg A, Roberts RJ. Postnatal increase in airway surfactant in the premature rabbit exposed in utero to betamethasone. *Dev Pharmacol Ther* 1983;6(6):388-403.
- Xu ZX, Rooney SA. Influence of dexamethasone on the lipid distribution of newly synthesized fatty acids in fetal rat lung. *Biochim Biophys Acta* 1989 Oct 17;1005(3):209-16.
- Xu ZX, Smart DA, Rooney SA. Glucocorticoid induction of fatty-acid synthase mediates the stimulatory effect of the hormone on choline-phosphate cytidyltransferase activity in fetal rat lung. *Biochim Biophys Acta* 1990 May 1;1044(1): 70-6.
- Xu ZX, Stenzel W, Sasic SM, Smart DA, Rooney SA. Glucocorticoid regulation of fatty acid synthase gene expression in fetal rat lung. *Am J Physiol* 1993 Aug;265(2 Pt 1):L140-7.

Renal Function

- Asayama K, Hayashibe H, Dobashi K, Uchida N, Kato K. Effect of dexamethasone on antioxidant enzymes in fetal rat lungs and kidneys. *Biol Neonate* 1992;62(2-3):136-44.
- Baum M, Quigley R. Prenatal glucocorticoids stimulate neonatal juxtamedullary proximal convoluted tubule acidification. *Am J Physiol* 1991 Nov;261(5 Pt 2):F746-52.
- Bian XP, Seidler FJ, Bartolome J, Kavlock RJ, Bartolome M, Slotkin TA. Dose-dependent effect of prenatal dexamethasone treatment on beta-adrenergic receptor coupling to ornithine decarboxylase and cyclic AMP. *J Dev Physiol* 1990 Sep;14(3):125-30.
- Bian XP, Seidler FJ, Slotkin TA. Promotional role for glucocorticoids in the development of intracellular signalling: enhanced cardiac and renal adenylate cyclase reactivity to beta-adrenergic and non-adrenergic stimuli after low-dose fetal dexamethasone exposure. *J Dev Physiol* 1991 Dec;16(6):331-9.
- Bian XP, Seidler FJ, Slotkin TA. Promotional role for glucocorticoids in the development of intracellular signalling: enhanced cardiac and renal adenylate cyclase reactivity to beta-adrenergic and non-adrenergic stimuli after low-dose fetal dexamethasone exposure. *J Dev Physiol* 1992 Jun;17(6):289-97.
- Celsi G, Wang ZM, Akusjarvi G, Aperia A. Sensitive periods for glucocorticoids' regulation of Na⁺,K⁽⁺⁾-ATPase mRNA in the developing lung and kidney. *Pediatr Res* 1993 Jan;33(1):5-9.
- Dobrovic-Jenik D, Milkovic S. Regulation of fetal Na⁺/K⁺-ATPase in rat kidney by corticosteroids. *Biochim Biophys Acta* 1988 Jul 21;942(2):227-35.
- Hill KJ, Lumbers ER, Elbourne I. The actions of cortisol on fetal renal function. *J Dev Physiol* 1988 Feb;10(1):85-96.
- Kudlacz EM, Navarro HA, Kavlock RJ, Slotkin TA. Regulation of postnatal beta-adrenergic receptor/adenylate cyclase development by prenatal agonist stimulation and steroids: alterations in rat kidney and lung after exposure to terbutaline or dexamethasone. *J Dev Physiol* 1990 Nov;14(5):273-81.
- Scholle S, Braunlich H. Effects of prenatally administered thyroid hormones or glucocorticoids on maturation of kidney function in newborn rats. *Dev Pharmacol Ther* 1989;12(3):162-8.
- Slotkin TA, Seidler FJ, Kavlock RJ, Gray JA. Fetal dexamethasone exposure accelerates development of renal function: relationship to dose, cell differentiation and growth inhibition. *J Dev Physiol* 1992 Feb;17(2):55-61.
- Slotkin TA, Seidler FJ, Kavlock RJ, Bartolome JV. Fetal dexamethasone exposure impairs cellular development in neonatal rat heart and kidney: effects on DNA and protein in whole tissues. *Teratology* 1991 Apr;43(4):301-6.
- Towstoles MK, McDougall JG, Wintour EM. Gestational changes in renal responsiveness to cortisol in the ovine fetus. *Pediatr Res* 1989 Jul;26(1):6-10.