Intervertebral Foramina

Disease in the region of the intervertebral foramina can cause compression of the emerging nerve roots. The roots can also be compressed at different sites along its path. Presentation of cauda equina or nerve root entrapment will therefore depend in which root is compressed, and where it is compressed.

Cauda Equina Syndrome

Cauda Equina Syndrome is due to a lesion of the lower lumbar and sacral nerve roots within the spinal canal. Depending on the cause, presentation usually begins with a prodromal stage of back pain and some mild leg symptoms. Symptoms and signs are those of a lower motor neuron lesion. Paresthesia, numbness, clumsiness and weakness, initially affecting the legs and subsequently perineal involvement, eventually results in urinary retention.

This frequently progresses within 48-72 hours and neurological status may not be retrievable even with appropriate management. The cause is most commonly a massive midline disc sequestration into the spinal canal, usually at L4-5 or L5-S1, rarely at L3-4. It may also occur with spondylolisthesis, in which case the sacral roots stretch over the posterior corner of the upper end-plate of S1.