The lateral parts of the occipital bones lie lateral to the foramen magnum and articulate with the temporal bone. On the inferior surface are oval condyles for articulation with the superior articular facets of the atlas. Anterior to the occipital condyles are the hypoglossal canals and posterior lies the condylar fossae, which are occasionally perforated by the condylar canals. Postero-lateral are the quadrilateral jugular processes, which are indented anteriorly by the jugular notches. The sigmoid sinus grooves the superior surface of the jugular processes and oval jugular tubercles overlie the hypoglossal canals.

Rectus capitis anterior attaches anterior to each occipital condyle, while medially is a tubercle for attachment of the alar ligament.