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C0266 - THE ORBITOSELLAR LINE: AN ANATOMICAL GUIDE FOR THE SELLAR AND PARASELLAR REGIONS IN EEA

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Resumen

Objectives: The parasellar region is a congested anatomical space surrounded by vital neurovascular structures located in a deep and narrow corridor with little margin for error. The margin is even further accentuated under anatomical variations and pathological conditions that distort normal anatomic relationship. As this region is the most accessed in skull base surgery, knowledge of critical anatomical landmarks and relative position of structures is critically important for safer access. We sought an anatomically based system of fiducial landmarks that would consistently create a superficial early bilateral “Outside-in” lateral to medial trajectory to locate in sequence the vital parasellar and sellar structures. To describe the orbitosellar line (OSL), which is a landmark that connects the orbit to the sellar region.

Methods: Five formalin-fixed and injected cadaveric heads were dissected in order to expose the OSL in a step-wise manner.

Results: We define the OSL as a line that connects three points. Anterior Orbital Point: the most anterior point of intersection of the Middle Turbinate with the Lamina Papyracea (LP), located 3.43 ± 0.91 cm above the intersection of the vertical plane of the lacrimal crests and the orthogonal plane of the maxilloethmoidal suture. Posterior Orbital Point: If a vertical line joining the vidian canal to the point at which the ethmoidal canal meets the LP is drawn it directly travels through the point at which the optic canal (OC) joins the LP, this latter point marks the POP. Explicitly, where the OC meets LP is the POP.MOCR.

Conclusions: The OSL serves as a reliable guide in the sequential exposure of the LP, OC and MOCR from a lateral to medial trajectory. We consider it as a guideline when working in the ventral anteromedial and anterolateral corridors in order to minimize neurovascular damage, by providing a step-by-step exposure of those structures.