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O-BC-08 - Eyelid frontoorbital approach

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Resumen

Objectives: To explore the anatomical landmarks, technical nuances and critical maneuvers of the eyelid frontoorbital approach and regions reached to treat pathologies of the anterior cranial fossa, as well as the clinical criteria to select the appropriate patients.

Material and methods: Five cadaveric specimens were dissected in order to show the anatomical features about this approach; three of them were fixed in etilenglicol solution for the initial part of soft and tarsal tissue dissection and two in formaldehyde for the intracranial exposure. Each approach included the following steps: tarsal dissection and subperiostic exposure, craniotomy and osteotomies, dural opening and intracranial exploration with cisternal dissection. A clinical case based on a 63 years old woman with an orbital roof meningioma that was surgically excised using this technique is also discussed.

Results: The dissections were completed in all cases without transgression of the periorbita, with a satisfactory exposure of the frontal bone and the junction with the zygoma and sphenoid wing. A 3 by 2.5 cm craniotomy was performed, including the orbital roof with a good skin retraction tolerance. Several intracranial structures were identified and exposed: chiasmatic and carotid cisterns bilaterally, ipsilateral Sylvian cistern, and its contents, planum sphenoidale and olfactory sulcus, frontal lobe unilaterally and the anterior aspect of the falx.

Conclusions: The eyelid frontoorbital approach may be considered as an optional cranial base approach, minimally invasive, equally effective and moreover, cosmetically beneficial, without losing exposure compared to other approaches used to treat selected anterior cranial base lesions.