Strategy of petrous meningiomas surgery

Introduction & Objective: Petrous meningioma is benign lesions; their total surgical excision is the only method for complete cure. However, their excision is confronted by deep location and critical anatomical relation and exact site of origin from the petrous bone. This study was conducted to plan a surgical strategy based on the site of attachment of the lesion in the petrous bone.

Methods: 25 were studied pre-operatively by neuroimaging especially Magnetic Resonance Imaging (MRI). To classify the types of petrous meningioma, all cases were studied operatively for the extent of the tumor removal while clinical status and the follow up and histopathological verification were evaluated.

Results: Radical surgical removal was achieved in eighteen patients (72%), subtotal removal in four cases (16%) and incomplete removal in another three cases (12%).

Conclusion: Complete surgical excision of the petrous meningioma can be planned pre-operatively depending on the exact site of the attachment to the petrous bone. There were four different zones on the surface of petrous bone on which different type of surgical approach can be used to achieve a better result about the safety of the patient and the extend of the excisions of the petrous meningiomas.

Biography