

Commentary

I read with great interest the manuscript: “Microsurgical management of benign lesions interior to the cavernous sinus (CS): A case series.” The authors have reported their experience and highlighted the challenges involved with surgical treatment of the CS lesions.

Numerous authors have described their experience in managing the lesions in and around the CS region. Such a sheer number of reports have created much confusion in the literature regarding the terminology used for lesions in the CS region. The normal microsurgical anatomy of the CS and the triangular corridors to approach the CS are well described in the literature.^[1-6] The approach selection is mainly based on the exact location of lesion in and around the CS. The lesions affecting CS includes vascular, neoplastic, infective, and inflammatory lesions arising in the CS proper or via extension from adjacent intra- and extra-cranial regions. The lesion such as intracavernous aneurysm and arteriovenous fistulae are generally smaller and does not cause significant distortion; hence, direct approach to these lesions based on the triangular corridors is feasible.^[2,7,8] The tumors involving CS might develop a large degree of anatomical distortion making the identification of these triangular corridors difficult. Therefore, the origin, growth pattern, displacement of the cranial nerves (CNs), and major blood vessels by the tumor are considered for the selection of surgical approach. The CS associated tumors can be characterized based on their origin, growth pattern in relation to the dural layers and membrane structures forming CS. Tumors originating from the CS can be classified as pure CS lesions such as CS cavernous hemangioma, tumors originating from the lateral wall of CS such as CS lateral wall meningioma and trigeminal schwannoma, and tumors originating from the structures surrounding CS and encroaching within the CS such as pituitary adenoma, chordoma, chondrosarcoma, pteroclivar meningioma, nasopharyngeal carcinoma, and sphenoid wing meningioma.^[9,10] Understanding the surgical anatomy in relation to tumor growth pattern is vital to plan optimal surgical approach to these lesions and to reduce the associated morbidity and mortality. Furthermore, it is important to use uniform terminology when describing these lesions, to facilitate comparison of the studies and to derive meaningful nuances and conclusions.

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