Dolenc's triangle

Its borders are the optic nerve, oculomotor nerve, tentorial edge (and the dura extending between the dural entry point of the third cranial nerve and the optic nerve) [1].

Its contents are the clinoidal internal carotid artery (ICA) and the anterior clinoid process.

Drilling the anterior clinoid process, either extradurally or intradurally exposes the clinoidal or anteromedial triangle area. It is bordered by the optic nerve medially, oculomotor nerve laterally, and the tentorial edge extending between the second and third cranial nerves at the base. Watanabe, et al. found that the average measurements of the medial border, lateral border, base, and the area are 9.5, 13.3, 7.2 mm and 32.3 mm2, respectively [2].

These dimensions have been further explored via microsurgical techniques on cadaveric dissections and the average sizes of the medial border, lateral border, base, and area are 7.34, 13.89, 8.53 mm and 26.25 mm2, respectively [3].

Day and Fukushima described the anterior triangle as defined by the lateral border of the optic nerve, the medial wall of the superior orbital fissure dura, and the dural ring surrounding the internal carotid artery (ICA) as it enters the subarachnoid space. According to these borders, they measured the dimensions as 6.30 posteriorly, 6.88 medially, and 8.72 mm laterally [4] [5].

Although these various authors differ in their measurements, they agree about this triangle’s content: the clinoidal segment of the ICA in the middle, optic strut anteriorly, and the roof of the cavernous sinus posteriorly. To reach the clinoidal ICA, the anterior clinoid process can be pneumatized so that the clinoidal ICA can be visualized [6].

1) , 2)
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4)
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5)
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6)
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