Endoscopic extradural anterior clinoidectomy

Since the first description of the intradural removal of the anterior clinoid process, numerous refinements and modifications have been proposed to simplify and enhance the safety of the technique. The growing use of endoscopes in endonasal and transcranial approaches has changed the traditional management of many skull base lesions.

An endoscopic extradural anterior clinoidectomy and optic nerve decompression through a minimally invasive pterional port. Minimally invasive optic nerve decompression, with endoscopic extradural anterior clinoidectomy, through a pterional keyhole craniotomy was performed on five preserved cadaveric heads. The endoscopic pterional port provided a shorter and more direct route to the anterior clinoid region, and helped avoid unnecessary and extensive bone removal. An extradural approach helped minimize complications associated with infraction of the subdural space and allowed for the maintenance of visibility while drilling with continuous irrigation. Adequate 270° bone decompression of the optic canal was achieved in all specimens. Endoscopic extradural anterior clinoidectomy and optic nerve decompression is feasible through a single minimally invasive pterional port [1)].

1)
Beer-Furlan A, Evins AI, Rigante L, Burrell JC, Anichini G, Stieg PE, Bernardo A. Endoscopic extradural anterior clinoidectomy and optic nerve decompression through a pterional port. J Clin Neurosci. 2013 Oct 25. pii: S0967-5868(13)00550-X. doi: 10.1016/j.jocn.2013.10.006. [Epub ahead of print] PubMed PMID: 24411319.