

SURGICAL NEUROLOGY INTERNATIONAL

SNI: General Neurosurgery

OPEN ACCESS

For entire Editorial Board visit :

Editor: C. David Hunt, M.D. Marquette General Neurosurgery, Brooklyn, NY USA

Video Abstract

Anterior clinoidectomy for paraclinoid aneurysms in Helsinki Neurosurgery

Joham Choque-Velasquez, Juha Hernesniemi¹

Department of Neurosurgery, Helsinki University Hospital, Helsinki, Finland, ¹International Center for Neurosurgery, Henan Provincial People's Hospital, Zhengzhou, China

E-mail: *Joham Choque-Velasquez - johchove@hotmail.com; Juha Hernesniemi - juha.hernesniemi@icloud.com *Corresponding author

Received: 30 July 18 Accepted: 09 August 18 Published: 10 September 18

Abstract

Background: In this video abstract, we present an intradural anterior clinoidectomy for management of some paraclinoid aneurysms. Quick adenosine cardiac arrest performed instead of an anterior clinoidectomy and proximal temporary clipping usually allows us a proximal control of aneurysms in Helsinki Neurosurgery. However, when the neck of the aneurysm remains hidden under the anterior clinoid process, or when some complex aneurysms have reduced space for placing temporary clips obstructing the definitive clipping, anterior clinoidectomy is the most available option.

Technique: The patient with multiple intracranial aneurysms had a ruptured anterior cerebral artery aneurysm associated with a right middle cerebral artery aneurysm and a right small paraclinoid aneurysm. The patient underwent surgical clipping of all aneurysms by a right lateral supraorbital approach at one-stage surgery. After the associated aneurysms were clipped, the hidden paraclinoid aneurysm required an anterior clinoidectomy for definitive clipping. A small durotomy over the anterior clinoid process was made with microscissors after bipolar coagulation. Subsequently, the anterior clinoidectomy was performed under visual control with the use of an electric high-speed diamond drill (3 mm diameter). The direction and size of the drilling were performed according to the anatomical configuration and exact location of the aneurysm determined by the preoperative radiological analysis of the case. A definitive clip was applied after complete visualization of aneurysm. Postoperative computed tomography angiography demonstrated absence of complications.

Conclusion: Anterior clinoidectomy is a useful procedure aiming at a proper definitive clipping of paraclinoid aneurysms with challenging locations and configurations.

Videolink: http://surgicalneurologyint.com/videogallery/right-clinoidectomy/

key Words: Anterior clinoidectomy, paraclinoid aneurysm, lateral supraorbital approach

Access this article online
Website:
www.surgicalneurologyint.com
DOI:
10.4103/sni.sni_261_18
Quick Response Code:

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Choque-Velasquez J, Hernesniemi J. Anterior clinoidectomy for paraclinoid aneurysms in Helsinki Neurosurgery. Surg Neurol Int 2018;9:185. http://surgicalneurologyint.com/Anterior-clinoidectomy-for-paraclinoid-aneurysms-in-Helsinki-Neurosurgery/