TRANSORBITAL APPROACH: EVERYTHING WE NEED TO KNOW, PROPOSAL OF NEW CONCEPTS

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Introduction

CETO transorbital endoscopic surgery is new in the world. It is divided into CETOA open transorbital endoscopic surgery and CETOE endoscopic endoscopic transorbital surgery (1)(3). Within the CETOE approaches we can see CETOEP pure transorbital approaches that can treat the superior, inferior, lateral or medial wall of the orbit (2)(8)(9). The medial wall approaches can be CETOEN nasal endoscopic approaches, which treat pathology of the posterior and anterior pole of the orbit. The purpose of this work is focused on endoscopic approaches.

Objective

The contribution of this work is:

1.-To know the existing possibilities for transorbital approaches.
2.-Expand the etiology that can be treated by the CETOEN approach
3.-To publicize in our environment the realization of CETOEP
4.-Observe signs and symptoms of severity that lead to surgical management.

Methods

A bibliographic review of all the patient that had Transorbit Endoscopic Approach was carried out between 2018 and 2015.
All patients when they consulted had low vision, blepharoptosis, and involvement of other cranial nerves such as IV and VI.
They were studied with tomography of the skull, orbit and paranasal sinuses and Nuclear Magnetic Resonance Imaging.

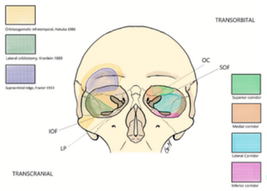
Tecnics

Nasal Endoscopic Surgery (CEN) has advanced with nasal, skull base and transorbital approaches. In transorbital approaches, the current literature describes:

Open transorbita surgery CETOA



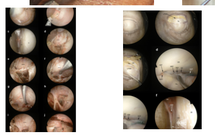
PURE TRANSORBITAL ENDOSCOPIC SURGERY (CETOEP)



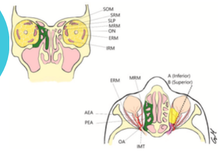
CETOEP: LATERAL AND INFERIOR



CETOEP: LATERAL AND SUPERIOR

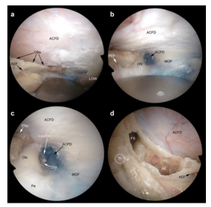


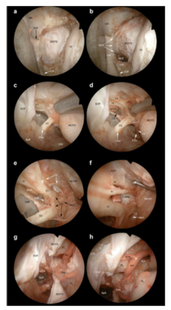
CETOEN: ANTERIOR AND POSTERIOR POLE

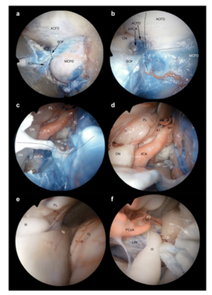


UPPER TRANSPALPEBRAL CETOEP

This approach can have different scopes:







Results CETOEN

A total of 13 CETON from de rear pole cases were presented, with a distribution between 7 and 60 years, with 23% being female and 77% male. In 85% of cases, the etiology of origin was mucormycosis in 64%, traumatic in 18%, and orbital tumors in 18%.
In 15% of the CETOENs, they were anterior pole pathologies, with 100% of the cases in male children with post-sinusitis orbital complications.

Results CETOEP

Our experience in CETOEP is recent, 4 cases that occurred in adults between 50 and 80 years old, 50% male. The etiology was skull base tumors lateral to the carotid. In all cases, transdural transorbital transpalpebral approaches were performed extended to the bifurcation of the internal carotid artery and adjacent structures.

Conclusions

CETOEN and CETOEP can help manage the entire orbit and even lateral skull base, also the risk of post-surgical fistula is low. For all these reasons, we recommend that new specialists learn these innovative techniques.
The signs of severity that are loss of vision, blepharoptosis and involvement of several cranial nerves, this gives us the need for surgical urgency.
Also in Bolivia with the suspicion that we will face mucormycosis, orbital neoplasms, post-sinusitis complications possibly due to anaerobes, and skull base tumors.

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