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Case Report

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Choristoma as an Indicental Finding in the Clivus after Cerebrospinal Fluid Fistula Secondary to Sars-Cov2-2 Nasal Swab

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Background

I present a case of cerebrospinal fluid fistula after a nasal swab sampling for SARS-CoV-2 diagnosis, with persistent intermittent symptoms. A brain MRI revealed an expansile lesion of the clivus. The case is highly interesting because the clivus is a rare location for salivary gland heterotopia.

Methods

I present the case of a 52-year-old patient who, after a nasal swab sampling for SARS-CoV-2 diagnosis, presented CSF fistula. After the swab, she reported a burning sensation and nasal leak of the left nostril after 24 hours, persistent and intermittent when she bended the head down and with certain head movements. Liquid was collected for several days, and the B-trace levels were in the upper reference limit. A brain MRI revealed a lesion on the clivus with extension towards the sphenoid sinus and the posterior cranial fossa that suggested ecchordosis physaliphora, with noticeable secondary CSF leakage with liquid on the dependent portion of the sphenoid sinus [1-6].

Results

The lesion of the clivus was excised and an endonasal endoscopic closure of the dural defect was performed through the fascia lata, fat, and Hadad flap. 3 days after discharge, she presented an emetic event with a new episode of CSF rhinorrhea. An emergency repair of the fistula was successfully conducted. Finally, the histological results revealed salivary gland heterotopia [7-13] (Figures 1-3).

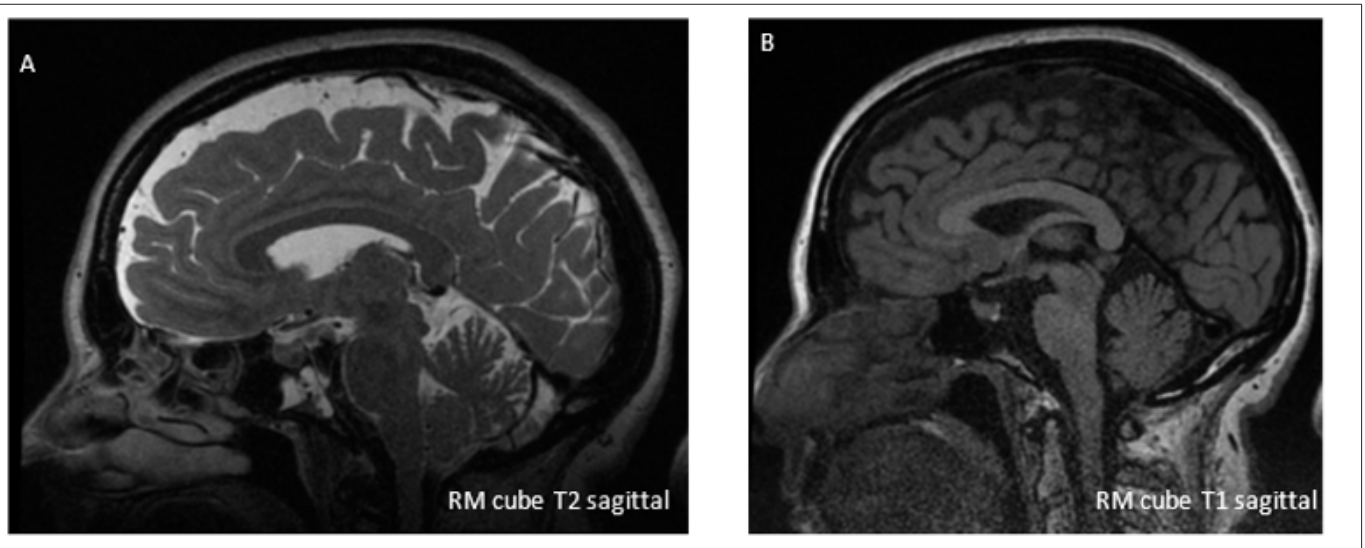

Figure 1: Lesion in the clivus at brain MRI Scan (Figure A: T2 MRI; Figure B: T1 MRI):

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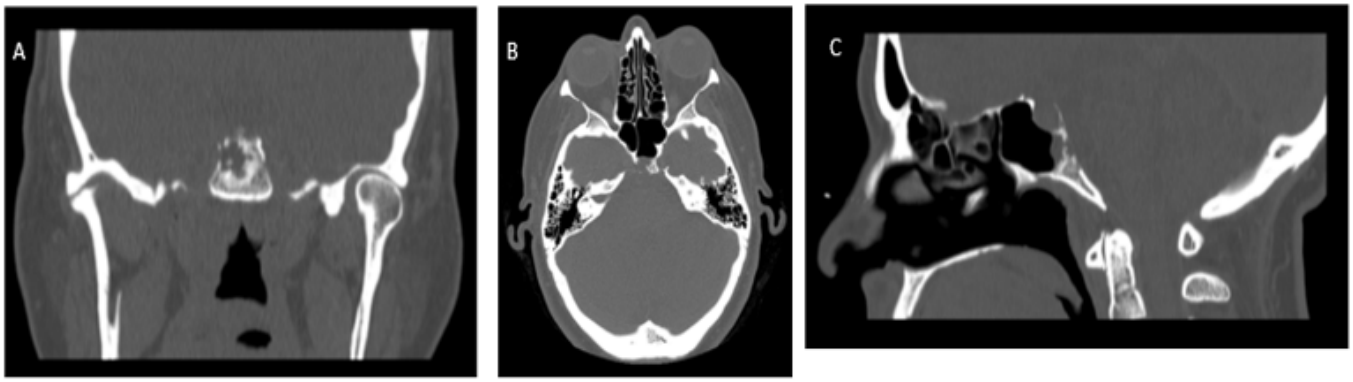

Figure 2: Abordajes Neuro quirúrgicos de la Patología Craneal y Cerebral (Figure A: Coronal; Figure B: Axial; Figure C: Sagital):

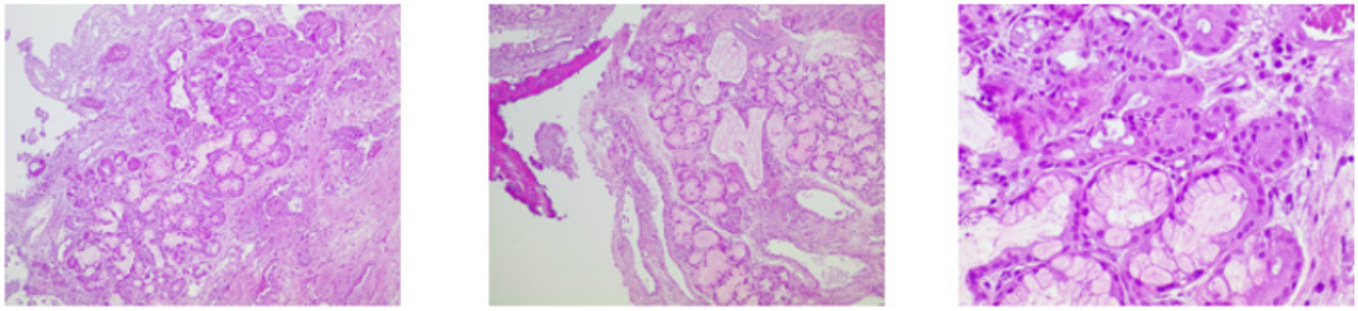

Figure 3: Anatomic pathology of Salivary Gland Choristoma/Heterotopia.

Conclusion

Salivary gland heterotopia in the clivus is a rare entity (salivary gland tumors represent almost 3% of all tumors of head and neck) with a casual diagnosis that was secondary to a CSF fistula after a nasal swab, which is in itself a rare condition. Salivary gland heterotopia must be treated with surgery, not only because of the CSF fistula in this case, but in general terms because this lesion risks becoming a pleomorphic adenoma.

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