Case Report

Pituitary adenoma and meningioma simulating a single selar and paraseal injury

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Objective

To analyze the importance of including axial cuts in studies of any brain region, including the selar. Remember the possibility of the existence of two different tumors simultaneously, in the same anatomical region.

Methods

We present the case of a 57-year-old woman with the clinical and analytical diagnosis of acromegaly. The pituitary MRI did not include axial cuts, but it clearly showed after the interpretation of the radiologist, endocrinologist and neurosurgeon, a right selar and parasellar lesion, which medially displaced the pituitary gland, with a size of 40 x 32 x 28 mm, which laterally surpassed the carotid artery and reached the Gasser ganglion region (Figure 1). With the diagnosis of pituitary macroadenoma producing GH, Knosp grade III, surgery was indicated.

Results

An expanded endonasal endoscopic approach was carried



Figure 1: Preoperative MRI showing a sellar mass with a significant portion lateral to internal carotid artery (Knosp 3). The preoperative diagnosis was pituitary macroadenoma GH secreting.

More Information

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Submitted: October 15, 2020 Approved: August 23, 2021 Published: August 24, 2021

How to cite this article: Pérez-López C, Flores AJP, Azriel S, Rodríguez-Domínguez V, Frutos R, et al. Pituitary adenoma and meningioma simulating a single selar and paraseal injury. J Neurosci Neurol Disord. 2021; 5: 087-088.

DOI: 10.29328/journal.jnnd.1001056

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out, remaining in the posterolateral area to the cavernous sinus. The pathological anatomy report confirmed that it was a GH-producing pituitary adenoma. In the postoperative period the patient had transient hypoesthesia in the territory of the first branches of the trigeminal nerve, and subsequent analyses showed, surprisingly, a cure of acromegaly. In control MRI, including this time axial cuts, an extraaxial lesion of 20 x 16 x 12 mm appeared, compatible with meningioma, centered on the ipsilateral petroclival ligament to the adenoma (Figure 2). Although this mass wasn't biopsed, with the diagnosis of suspected meningioma, it would later receive radiosurgery with volumetric stability after 8 years of follow-up [1-11].



Figure 2: Postoperative MRI. In axial image a lesión attached to petroclinoidal ligament is observed. The postoperative diagnosis was pituitary adenoma and meningioma.



Conclusion

It is essential to include axial cuts in all studies of the sellar region, since there are lesions that are difficult to characterize with only sagittal and coronal images. In this case, a cure of acromegaly after not completely removing what we thought was just adenoma, this proves it to us. In addition, it is a rare case of synchronous onset of meningioma and pituitary adenoma, which because it was intimately related, we were not able to diagnose correctly.

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