INCIDENTAL INTRA-INFUNDIBULAR PITUICYTOMA

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Figure. Infundibular pituicytoma. Axial T1W1 (Figure A), coronal T2W1 (Figure B) and sagittal T1W1 (Figure C) demonstrating a round, well-circumscribed lesion located in the infundibulum and separated from the pituitary gland.

A 59-year-old patient developed progressive atrophy of the right arm musculature and weakness following a water ski accident. A cervical spine MRI showed osteophytes at the C5-6 level that correlated with the distribution of his weakness, and a brain MRI identified an incidental, well-defined 5 x 4 mm nodular enlargement and enhancement of the pituitary infundibulum, without optic chiasm involvement (Fig. A, B, C). The suprasellar cistern was patent. The size, appearance, signal intensity and enhancement of the pituitary gland were normal.

The images are consistent with an infundibular pituicytoma. Pituicytomas are rare, slow growing, solid, WHO grade I neoplasms originating in the neurohypophysis or infundibulum (1). Definitive diagnosis is histologic and no malignant transformation has been reported to date (2). On MRI pituicytoma appears as a solid, intra or suprasellar, well circumscribed mass, isointense on T1 and iso- or slightly hyperintense on T2 weighted images and with uniform enhancement after gadolinium administration. Although these features are non-pathognomonic, radiologic diagnosis of pituicytoma should be considered in case of a completely

intracellular mass that clearly separates from the pituitary or a mass adjacent to or within the infundibulum, as in the case of our patient (3). Treatment of symptomatic pituicytoma is surgical, with no recurrence reported after complete removal. Due to their highly vascular nature, significant intraoperative bleeding can sometimes represent an unexpected intraoperative complication leading to incomplete resection followed by recurrence (3). There are no definitive recommendations for follow-up, although periodic imaging would appear reasonable especially after surgical resection.

References

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