

# Giant clinically Non-Functioning Pituitary Neuroendocrine Tumor

see also [Giant pituitary neuroendocrine tumor](#).

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Forty patients (24 men, age  $54.2 \pm 16.2$  years) were studied. The maximum tumor diameter [median (interquartile range)] was 4.6 cm (4.1-5.1). Women had larger tumors [4.8 cm (4.2-5.4) vs. 4.5 cm (4.0-4.9);  $p=0.048$ ]. Hypopituitarism [partial ( $n=22$ , 55%) or complete ( $n=9$ , 22.5%)] at diagnosis was present in 77.5% of the patients. Visual field defects were found in 90.9%. The most used surgical technique was endoscopic endonasal transsphenoidal (EET) surgery ( $n=31$ , 77.5%). Radiotherapy was used in 11 (27.5%) patients (median dose 50.4 Gy, range 50-54). Thirty-seven patients were followed for 36 months (10-67 months). Although more than half of these patients showed tumor persistence ( $n=25$ , 67.6%), tumor size was significantly reduced [0.8 cm (0-2.5);  $p<0.001$ ]. At last visit, 12 patients (32.4%) showed absence of tumor on MRI. Hypopituitarism rate was similar (75.0%), although with significant changes ( $p<0.001$ ) in the distribution of the type of hypopituitarism. The absence of tumor at the last visit was positively associated with positive immunohistochemical staining for FSH ( $p=0.01$ ) and LH ( $p=0.006$ ) and negatively with female sex ( $p=0.011$ ), cavernous sinus invasion ( $p=0.005$ ) and the presence of Knosp grade 4 ( $p=0.013$ ).

gNFPAs are more frequent in men but tumors are larger in women. Surgical treatment is followed by a complete tumor resection rate of approximately 30%. Positive immunostaining for gonadotropins is associated with tumor absence at last revision, while female sex and invasion of the cavernous sinuses with tumor persistence <sup>1)</sup>.

## Unclassified

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