



# Neurocirugía

<https://www.revistaneurocirugia.com>



## C0193 - TRANSSPHEOIDAL SURGERY FOR GIANT PITUITARY ADENOMAS: SURGICAL LIMITATION, EXTENT OF RESECTION AND OUTCOME

*W.K. Zakaria and A.N. Taha*

*Mansoura Medical School, Dakhlia, Egypt.*

### Resumen

**Objectives:** The introduction of endoscopy in the pituitary surgery expanded the scope of the trans-sphenoidal approach for resection of most pituitary adenomas and minimizing the needs for doing trans-cranial for such tumors. However, giant adenomas more than 4cm remains a big challenge for surgery.

**Methods:** In this retrospective study conducted on 26 cases of giant adenomas done in the neurosurgery department, from 2010 through 2018, we addressed the role of endoscopy in survey of giant adenomas regarding the surgical limitations, extent of resection, the needs for further treatment and patients outcome.

**Results:** 15 patients were operated up on via endoscopic assisted microscopic approach while the other 11 patients were operated up on via pure endoscopic approach. 16 cases were non functioning adenomas and were presented only with visual manifestations while the other 10 cases were functioning adenomas (6 cases were growth hormone secreting adenomas and 4 prolactinomas). In 14 cases the tumor had only suprasellar extension while in the other 12 cases; the tumor had both suprasellar and parasellar extension invading the cavernous sinus. Total resection was achieved in 15 patients. In 12 of them; the tumor has only suprasellar extension and 2 cases had parasellar extension. For the eleven cases with residual adenomas; 2 cases offered medical treatment (prolactinomas), 6 cases offered three dimensional radiotherapy and gamma knife radiosurgery was given to the other 3 cases. Post-operative complications included 4 cases of CSF rhinorrhoea, 2 cases of pneumocephalus and 3 cases of hypopituitarism and one cases of procedure abortion due to accidental intra-operative vascular injury.

**Conclusions:** Surgery for giant pituitary adenomas remains a challenge for the trans-sphenoidal approach and surgical difficulties and potential complications increase with the extent of parasellar extension.