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## O-BC-01 - A retrospective review of large and giant pituitary adenomas: Evaluation of surgical outcomes after endoscopic endonasal surgery on 26 consecutive cases

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### Resumen

**Objectives:** Present the surgical management of large ( $\geq 3$  cm) and giant pituitary adenomas in a series of 26 cases endoscopic endonasal approach (EEA).

**Material and methods:** A retrospective data analysis of all patients who underwent EEA surgery between 2008 and 2015 was performed searching large ( $\geq 3$  cm) and giant ( $\geq 4$  cm) pituitary adenomas. Analysis of factors related to preoperative clinical/radiological characteristics, growth pattern, extent of resection, outcomes, and complications were evaluated.

**Results:** 25/97 matched our criteria, with twenty nonfunctioning adenomas (77%), four acromegalias, one Cushing disease and one prolactinoma. Knops score distribution was 19%  $\leq 2$  and 81%  $\geq 3$ ; gross total (GTR), near total (NTR) and subtotal (STR) resections were achieved in eight (31%), thirteen (50%) and five (19%) cases, respectively. All patients with Knops  $\leq 3$  had either GTR or NTR and none with 4 achieved GTR. 24/25 (96%) had a "good" visual outcome (unchanged or improved). 24/25 (96%) had a "good" endocrine outcome (no new/unchanged hypopituitarism). Manageable complications included postoperative CSF leak in two cases, two postoperative surgical site hemorrhages (in relation to early reintroduction of anticoagulant drugs; both had an improved visual outcome) and one carotid artery injury (currently asymptomatic patient). Definite complications comprised one cranial nerve deficit and one diabetes insipidus.

**Conclusions:** Surgical treatment of large and giant adenomas represents a complex problem, but the EEA provides effective treatment when performed by a dedicated surgical team. In this subset of patients, the good clinical outcomes achieved make the technique a preferable option when compared to more aggressive craniofacial approaches.