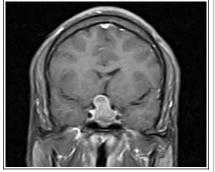


# Endoscopic Transsphenoidal Surgery for Acromegaly and Cushing's Disease: 6 Year Experience at a Single Institution

Silvia Tatiana Quintero Olivero MD; Roberto C. Diaz MD; Miguel E. Berbeo; Juan C. Acevedo MD; OSCAR HERNANDO FEO - LEE MD; Oscar Zorro MD

Hospital Universitario San Ignacio, Pontificia Universidad Javeriana, Bogota, Colombia

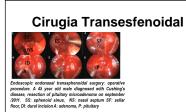
#### Tumor Inicial



## INTRODUCTION

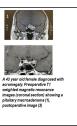
Transsphenoidal surgery is the approach of choice for over 90% of pituitary tumors. It is currently the first line of treatment in acromegaly and Cushing's disease although remission rates vary within centers. We present the institutional experience at Hospital Universitario San Ignacio (Bogotá, Colombia) performing fully endoscopic transsphenoidal approaches in patients with acromegaly and Cushing's disease from 2007 to 2012.

Forty four patients were included for analysis twenty one patients had acromegaly and twenty three had Cushing 's disease. The following report was made to assess the outcome of surgical treatment with regard to remission rates and surgical complications.



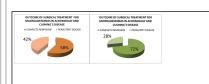
### METHODS

A six year retrospective analysis, one hundred forty nine endoscopic transsphenoidal surgeries were performed by a single neurosurgeon in collaboration with an ENT specialist.



## RESULT RATE REMISION

18 patients (72%) with microadenomas and 11 (58%)with macroadenomas achieved postoperative remission.



Transient diabetes insipidus was the most frequent complication (six patients, 13%)

When surgery fails to obtain remission, medical therapy is continued. Of patients with acromegaly, eight received somatostatin analogues, six patients ocreotide and two patients lanreotide. Remission rate with pharmacologic therapy was 50%. Two patients with persistent Cushing's disease continue therapy with ketoconazol.

Three patients received radiation therapy. Of those, 1 patient achieved remission.



**DISCUSSION:** Our results are similar to those reported previously in the literature, remission rates higher in patients with microadenomas. Cure by surgery alone is improbable in invasive tumors with high secretory activity.

Remission rates were significantly higher in series where all surgical procedures were performed by the same surgeon. The surgeon's experience significantly improves the surgical outcome.

#### CONCLUSIONS

Surgery is a very important part in the treatment of many patients with functioning pituitary adenomas. Endoscopic endonasal approaches have proven to be safe which has made their use widespread. Transsphenoidal surgery is currently the first line treatment of acromegaly and Cushing 's disease.

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