

## Management Of Acromegaly: 11 Years' Experience From A Tertiary Care Center In Pakistan

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### **Introduction:**

Acromegaly is an endocrinological disorder of pituitary gland due to increased secretion of Growth Hormone (GH) & Insulin-like growth factor (IGF-1), presenting with hypertension (HTN), diabetes mellitus (DM) and cardiovascular disease.

Treatment goals for acromegaly include, reducing GH and IGF-I level via somatostatin analogue, symptom control & operative resection of the tumor. Acromegaly consensus group has identified Surgery as the primary treatment.

All patients who underwent Acromegaly treatment at the Aga Khan University from 2006-2017 were enrolled in this study. Data was collected retrospectively by reviewing patients' medical records.

### **Report:**

Acromegaly accounts for 15.4% of all pituitary lesions. 39 patients were included in the study. Mean age was 40.8 years with mean BMI of 27.9kg/m<sup>2</sup>. Common presenting complains headache (74.4%), increased hands/feet size (61.5%) and visual impairment (48.7%). Hypertension (46.2%) and DM (30.8%) were the most common co-morbidities. All patients underwent trans-sphenoidal approach for tumor resection, including endoscopic (46%), microscopic (35.9%), and combination (18%).

Mean GH and IGF-1 levels before surgery were 55.13ng/ml and 886ng/ml, which showed reduction of 74.1% and 41.1% after surgery. Mean tumor size was 27.82mm with 86.4% reduction in tumor size post-operatively. 5 patients relapsed. 3 had interval increase in tumor size and 2 patients had increase in IGF-1 levels inspite of no residual tumor on post-op MRI. Average duration between the two surgeries was 4.6 years.

### **Conclusion:**

We described our 11 years' experience with management of Acromegaly. Transphenoidal resection remains best initial treatment modality with reduction in tumor size and biological markers.