



# Difficulties of acromegaly treatment in young patients clinical case

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The last decade has provided major progress in the development of highly specific and selective pharmacological agents that have facilitated a more aggressive approach to the treatment of patients with acromegaly. Transsphenoidal surgery still appears to be the best option for most of the patients with GH secreting adenomas. In many cases the biochemical cure targets are not reached and the patient needs adjuvant therapy. Alternatives include medical therapy with somatostatin analogues, growth-hormone-receptor antagonists and dopamine agonists. These drugs can be used alone or in combination. Radiation therapy with conventional fractionated photons or radiosurgery with proton beam could also be effective in some cases.

## CB 26 years old

Iasi (October 2008)

### Complaints

Headache, excessive perspiration, fatigue, acral enlargement of hand and feet

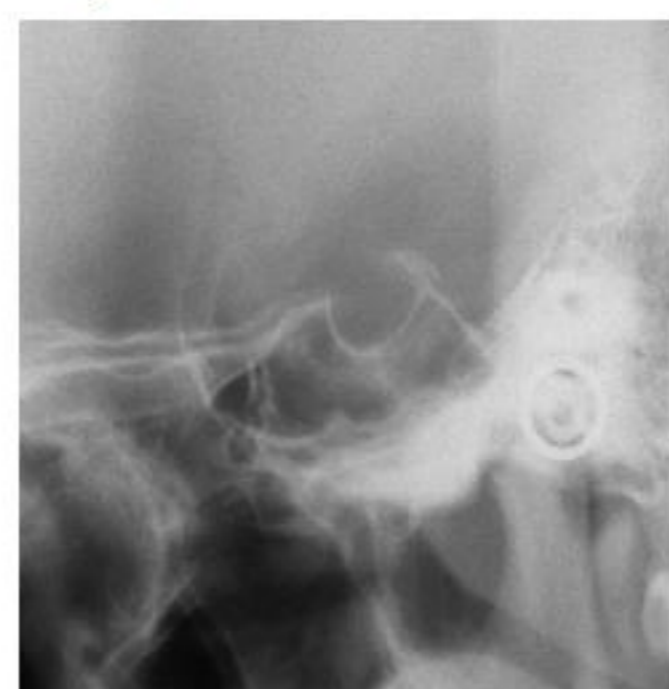


## Biochemical findings

Bazal GH – 156,8  $\mu$ UI/ml (< 34 mIU/ml)  
IGF-1 - 838,4 ng/ml (150 – 350)  
GH during the glucose suppression test - 153,5  $\mu$ UI/ml (not suppressed);

### Lateral skull X-ray

Major enlargement of the pituitary fossa



### Pituitary CT

Expansive pituitary tumour

Octreotide (Sandostatin LAR®) 20 mg/28 days

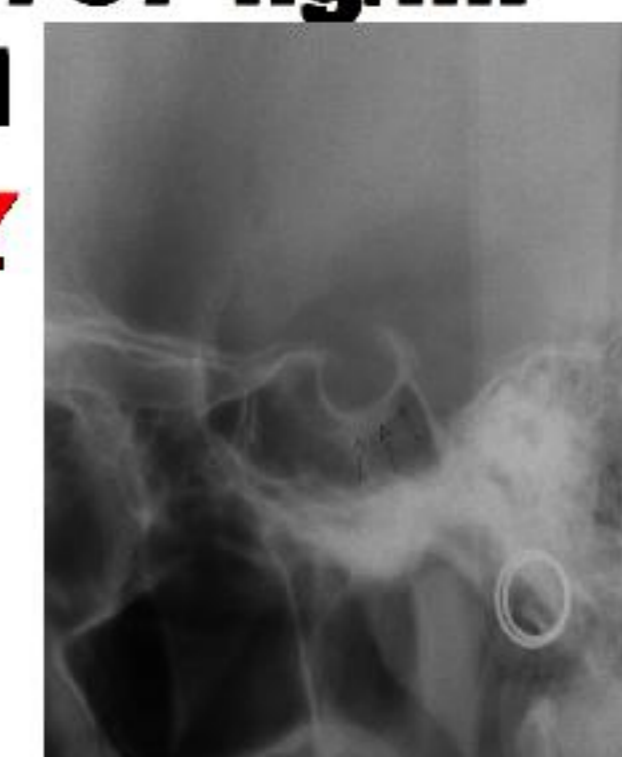


## Biochemical findings

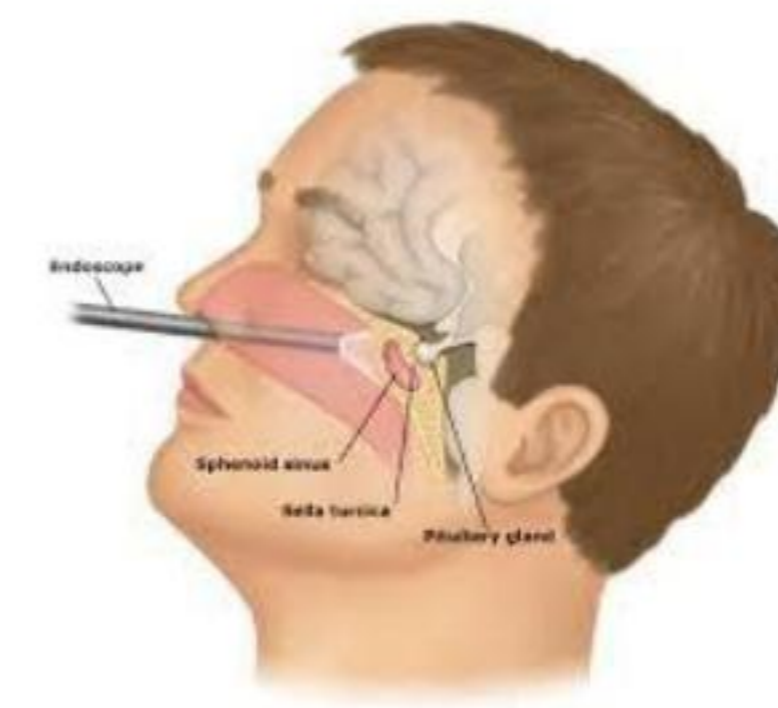
IGF1 - X 2009 - 677 ng/ml  
- VIII 2010 - 767 ng/ml  
GH - < 34 mIU/ml

### Lateral skull X-ray

Major enlargement of the pituitary fossa

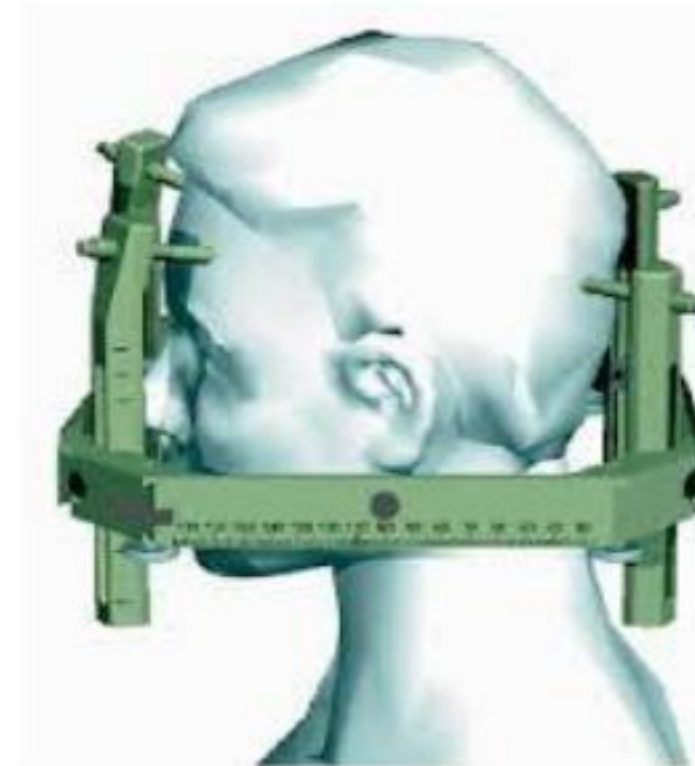


Transsphenoidal surgery in August 2011 (difficult to perform due to severe bleeding and anatomical abnormalities).



## Gamma Knife

(September 2011)



The patient develops thyrotrop insufficiency (L-thyroxin 100ug/day), hypertension (nebivolol 5mg/day, lecardipin 10mg/day) and impaired fasting glucose.

January 2012 – poor clinical status

Octreotide (Sandostatin LAR®) 20 mg/28 days/ 6 months → 30 mg/28 days

## Biochemical findings

IGF1 - X 2012 - 631 ng/ml  
- VI 2013 - 403 ng/ml  
- I 2014 - 1182 ng/ml

We decided to start

Octreotide (Sandostatin LAR®) 40 mg/28 days and Somavert (Pegvisomant) 10 mg/daily sc

IGF1 - V 2014 - 493 ng/ml  
VII 2014 - 587 ng/ml  
XII 2014 - 541 ng/ml

## Conclusions

The particularity of the case is represented by the age of the patient and by the fact that throughout a relative short period of time he received the latest available therapy in acromegaly.

