

FoRiSIE Winter School in Clinical Endocrinology

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La terapia della ipersecrezione ipofisaria: acromegalia

CASE REPORT 2

Specializzando: Davide Menafrà
Tutor: Prof.ssa Maria Cristina De Martino

“AOU FEDERICO II” di Napoli
UOC di Endocrinologia

Case report: Clinical presentation and Diagnosis

Man, 35 yrs

Since 8 yrs:

- Acral and facial overgrowth
- Mandibular prognathism
- Hyperhidrosis
- Headaches
- Paresthesia
- Fatigue
- Osteoarthritis

LABORATORY TEST:

GH= 10.6 ng/ml (<2.5)

GH nadir= 8.97 ng/ml (<1.0)

IGF-I= 1205 ng/ml (115-305)

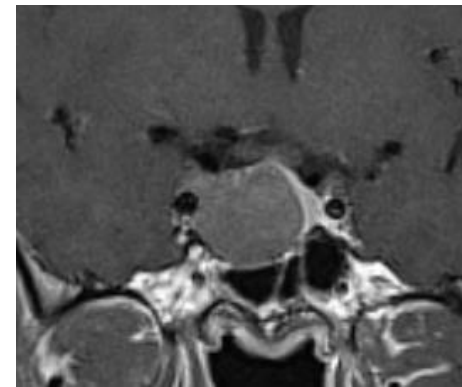
PRL= 6 ng/ml

T= 4.5 ng/ml

TSH= 1.1 μ U/ml

FT4= 1.2 ng/ml

HbA1c= 6.7%



MRI: Invasive pituitary macroadenoma (26x22 mm)

VISUAL FIELD: Bitemporal hemianopsia

Decision 1: Which is the most appropriate first-line therapy and why?

1. Pituitary Surgery
2. Pituitary Radiotherapy
3. Preoperative somatostatin analogs
4. Dopamine agonists

AACE Guidelines

Acromegaly

Considerations for first line medical therapy

- If majority of tumour unresectable and no chiasmal compression
- Poor surgical candidate

Surgical debulking

Transsphenoidal surgery
(most patients)

Persistent disease
(incomplete surgery)

Remission

Medical therapy

- Annual IGF-1 and random GH
- Consider OGTT

SSA
(for most)

Dopamine agonist
(mild disease)

Pegvisomant

MRI (if clinical or biochemical signs of recurrence)

Radiation therapy may be considered at any point following incomplete surgery or ineffective/intolerable medications

- **Partial clinical and biochemical response to maximal doses**
 - Consider combination therapy of above drugs
- **No clinical and biochemical response**
 - Consider alternative monotherapy

First-line treatment

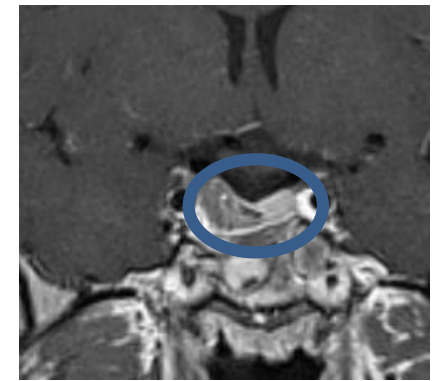
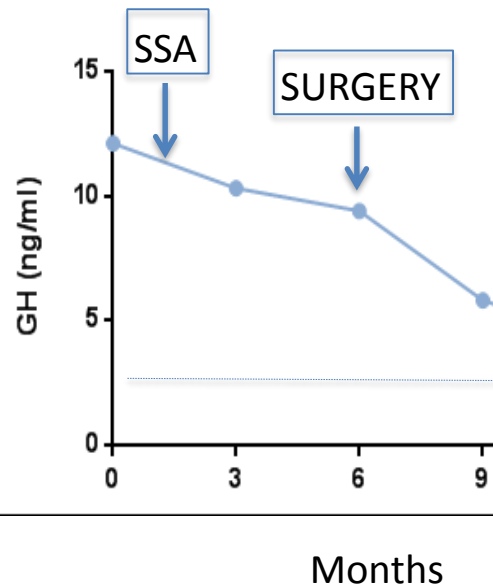
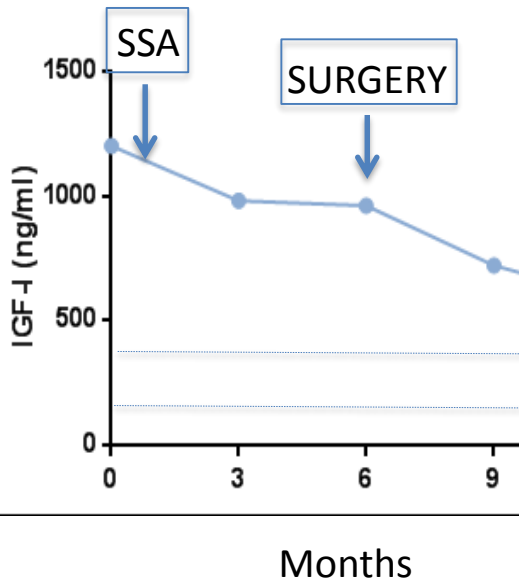
6-month preoperative Octreotide LAR 30 mg/28 days



Improvement of sign and symptoms; tumor shrinkage (18x14 mm)

Second-line treatment

Neurosurgery: transsphenoidal adenomectomy



Post-surgery MRI:
10x11 mm adenoma

Decision 2: What tertiary therapeutic option would you choose and why?

1. Repeat Surgery
2. Radiotherapy
3. Somatostatin analogs
4. Pegvisomant

Third-line treatment

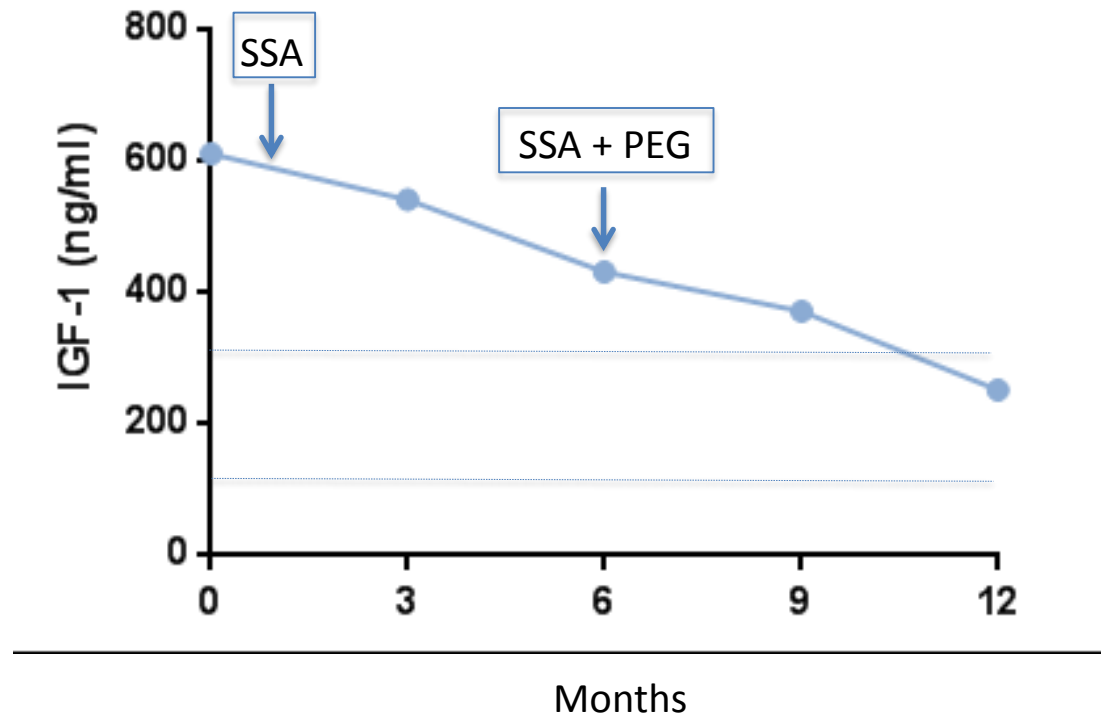


6-month post-operative Octreotide LAR 30 mg/28 days

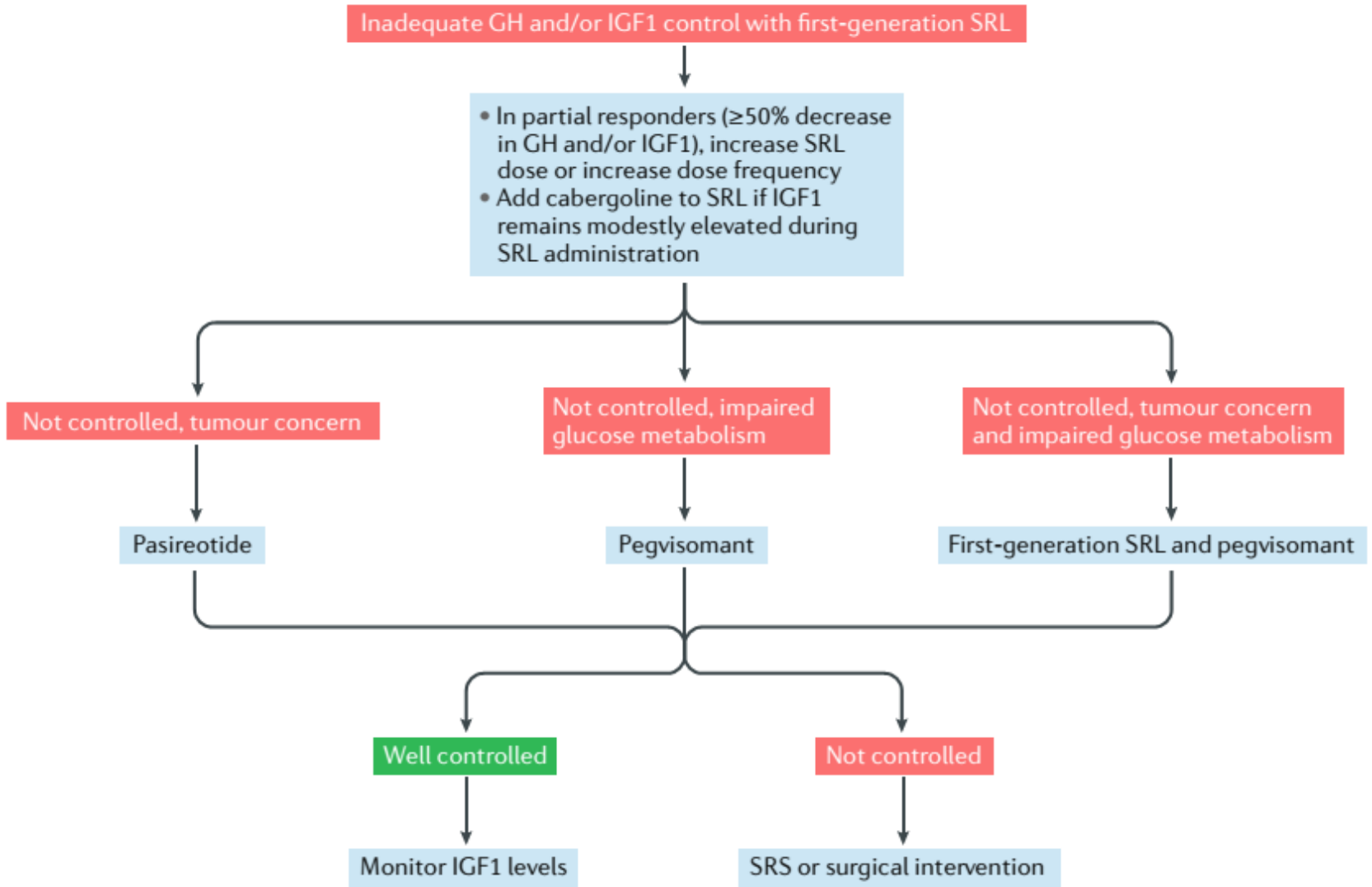
Fourth-line treatment



Combined treatment Octreotide LAR 30 mg/28 days + Pegvisomant 15 mg/day



ALGORITHM FOR ACROMEGALY MEDICAL TREATMENT



Question 3: Which are the advantages of an effective therapy in acromegaly?

1. Reduced mortality
2. Better quality of life
3. Reduced comorbidities
4. All the options

Conceptual model of the value of disease control in acromegaly

