Surgical approach to the cavernous sinus

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Clinical case (2003)

- Female, 23 y
- Architecture student
- 2003: acromegaly e decreased visual acuity (RE < 1/10 - LE 10/10)
Clinical case (2003)

- Craniotomy (2003), right pterional approach
- Histology: GH secreting macroadenoma
- Post op: octreotide in increasing doses (10mg → 30mg)

<table>
<thead>
<tr>
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<th>GH</th>
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<tbody>
<tr>
<td>Pre op</td>
<td>77.4 pg/ml</td>
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<tr>
<td>Post op</td>
<td>23.5 pg/ml</td>
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Clinical case (2007)

• Architect

• July 2007: tumor recurrence
  • GH 19.2 pg/ml

• FSR Nov/2007 (6 cycles of 5 days)
Clinical case (2007) – post FSR

- December 2007 (2\textsuperscript{nd} week post FSR)
  - left hemicrania headache, diplopia
  - sudden left III CN complete palsy, latter left VI CN palsy
Clinical case (2007) – post FSR
Clinical case (2007) – post FSR

- Surgery (December 2007): left pterional craniotomy, sellar and cavernous sinus approach

- Histology: GH, FSH and LH secreting macroadenoma with parcial pituitary apoplexy

- Post-op: FSR (5 weeks)
Anatomy
Clinical case

- CN recovery (1\textsuperscript{st} III CN, then VI CN)

- Endocrinologic improvement
  - glucose levels (90-100 mg/dl)
  - GH = 2.53
  - IGF = 214
Clinical case – post op/ post FSR
Conclusions

- Detailed knowledge of the cavernous sinus anatomy
- Experience + anatomy: safe surgery with low morbidity, changing natural history
- Surgical tumor reduction enhances success of subsequent therapy
- Provide a route to basilar tip, carotid-ophthalmic and paraclinoid aneurysms, sellar and clivus tumors