Author's response to reviews

Title: Acromegaly resolution after traumatic brain injury: case report

Authors:

Alejandro Cob (alejandro.cobg@gmail.com)

Version: 4 Date: 20 May 2014

Author's response to reviews: see over
Author's response to reviews

Title: Acromegaly resolution after traumatic brain injury: case presentation

Authors:
Alejandro Cob (alejandro.cobg@gmail.com)

Version: 4 Date: 20 May 2014

Author’s response to reviews: see over
Reviewer's report

Title: Acromegaly resolution after traumatic brain injury: case report

Version: 3 Date: 6 May 2014

Reviewer: Bernhard Schaller

Reviewer report:

The author present an interesting and well-written case report. I would suggest to substantially shorten the report.

I considered your suggestion, but I believe the entire information is essential to understand the presentation and outcome of the case. Shortening the case report will be inconvenient to accomplish the goal of the further discussion.

In the discussion, the pulsatile character of growth hormone and its substitutes should be discussed and taken into consideration.

The sentence “Considering that GH has a pulsatile secretion pattern during the day, dynamic pituitary testing was performed to confirm the diagnosis.” was inserted in the first paragraph of the discussion section to explain emphasize the importance of the medical assessment with a dynamic test.
Reviewer’s report

Title: Acromegaly resolution after traumatic brain injury: case report

Version: 3
Date: 15 May 2014

Reviewer: Vera Popovic

Which of the following best describes what type of case report this is? Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: No

Is this case worth reporting?: Yes

Is the case report persuasive?: Yes

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Is the anonymity of the patient protected?: Yes

Reviewer report:

Major comments that needs to be discussed in this interesting case report is the possibility that apoplexy of the pituitary tumor which may have occurred and caused hypopituitarism with subsequent tumor shrinkage. Pituitary apoplexy is very common in macroadenomas and some are asymptomatic and may resolve spontaneously. The mechanism of apoplexy are several 1. Rapidly expanding adenoma outgrows its blood supply (ischemic necrosis) 2. Suprasellar extension leads to compression of pituitary portal blood supply 3. Intrinsic vasculopathy supporting a pituitary tumor. There are risk factors for pituitary apoplexy.

# Risk factors for pituitary apoplexy

– Major surgery (cardiac)

– Dynamic pituitary testing – Anticoagulation treatment

– Coagulopathies

– Head trauma

– Dopamine agonists
– Acute systemic illness
– Pregnancy and oral contraceptives
– Diabetes mellitus
– Hypertension

The presented case had several risk factors: head trauma, dynamic pituitary testing (TRH test), diabetes mellitus.

The following paragraph was included in the discussion section: “Even though there was a clear chronological relation between the head trauma and the decrease of GH and IGF-1 levels, there are causes other than head trauma that might trigger pituitary apoplexy. Intrinsic vasculopathy or a rapidly increase in size of the intrasellar content leads to increase intrasellar pressure and compression of the pituitary portal blood supply with subsequent tumor shrinkage”, in order to complement the different pathophysiology of pituitary adenoma apoplexy.

Also in the conclusion section there is a comment on the possible mechanism of head trauma as the main cause of the tumor shrinkage of this case.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable