Reviewer's report

Title: Ectopic Cushing's Syndrome caused by a Neuroendocrine Carcinoma of the Mesentery

Version: 1 Date: 31 March 2006

Reviewer: Alessandro Peri

Reviewer's report:

General
The manuscript reports a case of ectopic Cushing's syndrome due to a neuroendocrine carcinoma of the mesentery. The diagnostic workout appears to be reasonable and the manuscript is well written. However, the authors are asked to consider the following points, as detailed below, and to add appropriate comments in their paper.

---------------------------------------------------------------------------------

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)
The authors should explain why a virtually subtotal thyroidectomy was performed (not hemithyroidectomy as claimed in the abstract and in the discussion. This term should be modified).
Nodules were present also in the right lobe?
The explanation in the discussion regarding thyroidectomy, beside the presence of an autonomous adenoma ("...with the intention to exclude medullary thyroid carcinoma...") is not convincing, because CT was normal. Ultrasound imaging apparently was not suggestive of malignant lesions. In addition, a pentagastrin test should have been performed, in case medullary thyroid carcinoma was suspected.
In addition to immunohistochemistry, mRNA evaluation of sstr should have been performed. In fact, mRNA assessment might have circumvent the possibility that the immunohistochemistry was falsely negative, due to sstr saturation by 111In-pentetreotide.

---------------------------------------------------------------------------------

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)
Page 3: the plasma level of TSH, fT4, fT3 should be added.
The decision to submit the patient to surgery for the removal of the lesion of the neurohypophysis appears rather aggressive, although reasonable, based on the literature report. The authors should clarify whether diabetes insipidus was transient or permanent.
Were neuroendocrine markers evaluated before surgery? If yes, their values should be added, in order to compare the pre- and post-operative levels.
The simultaneous use of metyrapone and hydrocortisone (and their dosage) should be commented.

---------------------------------------------------------------------------------

Discretionary Revisions (which the author can choose to ignore)
Was an octreotide test considered, in order to determine whether a suppression of cortisol level could be obtained? In fact, treatment with somatostatin analogs might have been considered, instead of metyrapone and hydrocortisone (the authors say they encountered difficulty in controlling cortisol level with this regimen).
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.