Reviewer's report

Title: Primary papillary carcinoma of the thymus with invasion into subcutaneous tissue through the sternum

Version: 2
Date: 11 March 2014
Reviewer: Andrea Imperatori

Reviewer's report:

This case report focuses on papillary adenocarcinoma of the thymus that is an actually rare tumour. The clinical course and pathological diagnosis of this case were interesting and reasonable. So, the case report is to be considered within the aims of the journal. However, I suggest to revise this case report according to the following points.

Major Compulsory Revisions

1) In the “case report” section the Authors should include the Masaoka staging of the tumour and also the recently proposed Weissferdt-Moran TNM Staging System for Thymic Carcinoma (Am J Clin Pathol 2012;138:115-121). Moreover, they could also include in the “Discussion” section the relevance of staging in this case together with point 3 (adjuvant therapy).

2) There is no description of the operative technique of chest wall reconstruction except for the fact that the Authors did not reconstruct the sternal defect. Authors should mention what they used to reconstruct the muscle-subcutaneous and skin integrity. In the literature and in clinical practice there are many described techniques (- reconstruction with polymethylmethacrylate and mesh; - prosthetic bony reconstruction with polypropylene mesh and pedicle latissimus dorsi flap or pedicled omental flap and skin graft; - reconstruction using a titanium mesh covered with a transverse rectus abdominis myocutaneous flap; - Composix mesh, titanium mesh, and Marlex mesh, using a right pectoralis major muscle flap translation; etc.). The Authors should better describe and explain their choice and discuss the possible alternatives.

3) As correctly stated by the Authors, in similar cases the recurrence rate of thymic carcinoma is very high both at local site and as pleural dissemination. Authors should explain the reasons why the patient did not receive any adjuvant therapy.

Discretionary Revisions

4) Finally, at the discretion of the Authors, they could evaluate expression of STAT3 (of signal transducers and activators of transcription 3) protein in the reported tumour. Few reports underline the prognostic role of STAT3 in thymic epithelial tumors, correlating STAT3 positive expression with tumour recurrence. (Li et al. Journal of Cardiothoracic Surgery 2013, 8:92). Because the presented
case is free of disease at 3 years, without adjuvant therapy, it could be interesting to know the expression of STAT3.

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

**Quality of written English:** Needs some language corrections before being published

**Declaration of competing interests:**

I declare that I have no competing interests.