Reviewer's report

Title: Surgical Management of A Giant Sternal Chondromyxoid Fibroma: A Case Report

Version: 2 Date: 10 August 2015

Reviewer: Giuseppe Marulli

Reviewer's report:

Authors report a case of a surgical resection of the upper sternum for a rare disease and subsequent anterior chest wall reconstruction with a single custom-made titanium plate. They report the complication of this type of reconstruction (double rupture of the titanium bar at the level of the clavicular articulation) and its management with a mesh.

The case is interesting but some points need to be clarified as follow:

A) Major compulsory revisions

- the authors have used a single plat titanium bar: does this prosthesis is provided for that use (i.e. the manufacture is approved by FDA or CE) or is a "custom-made" prosthesis with an off-label use. This point is of paramount importance because at the moment to my knowledge no specific plates or prosthesis have been commercialized for the purpose of the reconstruction of the anterior chest wall with clavicular involvement.

- the authors should better clarify in the text that the probable reason for their failure was the attempt to reconstruct the sternoclavicular joints. In fact this articulation is continuously in movement and under "stress".

- the authors should explain better in the report some technical details (e.g. in which manner they have fixed the bar to both claviculae) of surgical technique and also if the patient was informed about the risks related to the movements in particular at the level of the sternoclavicular joints.

- Did the patient use particular care or some corset or Desault?

B) Minor essential revisions

- Have the authors an explanation why the two ruptures of the bars were delayed?

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Declaration of competing interests:

No competing interests.