Reviewer's report

Title: Neck fracture of a cementless forged titanium alloy femoral stem following Total Hip Arthroplasty: a case report and review of the literature.

Version: 3 Date: 7 October 2007

Reviewer: elias panagiotopoulos

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

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?: No

Will the case report make a difference to clinical practice?: No

Comments to authors:

This is a well written, interesting case report worth publishing.

However the abstract must be revised. First paragraph is a good history report of the fractured femoral stems but this should rather be placed in the discussion. In the second paragraph emphasis should given in the reported case and the clear message which the authors like pass to the Orthopaedic community.

Moreover the authors state that although "the fracture occurred at the smallest section of the neck, the laser etched markings in a region of the implant neck subjected to high stresses, leaded to decrease fatigue resistance."

This statement looks rather unsubstantiated and needs either further explanation or should be withdrawn.

Geometry and machining on themselves are good reasons for fatigue fracture in the weakest site of the neck of the femoral stem.

The discussion should be shortened.

Finally in the conclusion the message emerged form this study should be sort
and clear.

**What next?:** Accept after minor revisions

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