Reviewer’s report

**Title:** Total hip arthroplasty for Crowe IV hip without subtrochanteric shortening osteotomy - a long term follow up study

**Version:** 2  **Date:** 7 September 2013

**Reviewer:** Jianning Zhao

**Reviewer’s report:**

The author has described an interesting retrospective study with a long term results. The survivorship is encouraging when the non-shortening osteotomy was applied for the anatomic reduction of the highly dislocated hip. As the technique was complicated more information need to be provided by the author, which is as follows:

**Minor Essential Revisions**

1. The highly translated distance of femoral head before surgery;
2. The percentage of structural bone graft for the acetabulum need to be described, because the end of follow up was defined as any revision of the components including the cup;
3. The preoperative and postoperative horizontal distance between the femoral head center and the true hip center;
4. The reduction of the hip after all the components were placed was otherwise difficult without the part or total release of the iliopsoas or the help of the Hoffman retractor, please address the technique if the iliopsoas was intact or no other instruments were used;
5. Because of the deformity of the proximal femur the lessor trochanter could not indicate the anteversion of the stem, how did the author reference to determine this angle when the canal reamer was impacted?
6. Even if the abductor was intact the Trendelenburg sign was also reported positive in part of the cases in previous studies, the preoperative and postoperative positive rate of the Trendelenburg sign need to be recorded;
7. The preoperative and postoperative Leg length discrepancy need to be described as the long term discrepancy of the legs was reported to cause chronic low back pain.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.
Declaration of competing interests:

'I declare that I have no competing interests'