Reviewer's report

Title: Pathological fracture of the femur in Alagille syndrome treated with low-intensity pulsed ultrasound stimulation and Ilizarov ring fixator

Version: 3
Date: 1 May 2014

Reviewer: Henry Dushan Edward Atkinson

Reviewer's report:

The case report is quite interesting; though not exceptional. This is a rare syndrome, and the authors use a fairly established fracture management technique.

Major compulsory revisions

The English language needs tidying up by a Medical native English speaker. Aside from this, the case report is acceptable.

There are a few fundamental mistakes and changes need to be made

"It was considered difficult to do rigid fixation with an elastic nail because the femoral medullary cavity diameter was very small"

Nailing is not a method by which one obtains rigid fixation. This should read "Elastic nailing was considered, however due to her narrow intramedullary canal this was judged to not be a viable fixation method".

the same inaccuracy is then again repeated when you describe "rigidly fixing" the fracture with a frame. This is not rigid and the fracture heals secondarily with callus!

the "conclusions" section should be termed "Discussion"

There is nothing in the discussion about why the bone stimulator was necessary, nor any information about bony healing in Alagille syndrome.
Surely the fracture would have healed just as quickly with the frame alone?

"With the help of this treatment, the healing time and the duration of external fixation can be reliably shortened." - This statement cannot be justified, and there is no comparison, and again was the bone stimulator actually necessary?

The discussion could have mentioned the normal healing times for femoral fractures in children, which are generally short.

Figures are ok,
Level of interest: An article of limited interest

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

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests