Reviewer's report

Title: Accelerated Tibial Fracture Union in 3rd Trimester of Pregnancy - A case report

Version: 3 Date: 17 December 2007

Reviewer: Michael Carmont

I am familiar with the literature and believe that this case meets one of the 7 criteria for evaluation in the journal: An unexpected event in the course of observing or treating a patient

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: No

Does the case report have explanatory value?: Yes

Does the case report have diagnostic value?: Yes

Will the case report make a difference to clinical practice?: Yes

Comments to authors:

Summary:
The authors present a case of a tibial fracture sustained in the third trimester of pregnancy which healed within 4 weeks.

General comments:
The case is interesting and is worthy of publication however I feel that a few adjustments need to be made.

In the abstract I think the term report a case is better than "the first reported case". In the third sentence a more scientific term could be used in place of "after delivery of the baby" eg post partition.

In the introduction, I think the commonest long bone to be fractured is actually the radius. In sentence 4 delayed union, mal-union and non-union are listed as complications of non operative treatment. They can of course occur in cases treated with operative treatment also and this should be amended. In the third paragraph the introduction will be made clearer by commenting that the hormones mentioned are increased during pregnancy.
The case report is good and well written.

The discussion is also good and draws the report together. The sentences regarding the heart rate and other cardiac changes are informative but it is not immediately obvious why the authors have included this detail. In this reference limited journal, 2 references are wasted here and could be better used elsewhere. E.g. more detail on tibial fracture healing time.

I do not really believe that a 135 kg woman who was 34 weeks pregnant could partially weight bear but would probably weight bear fully as comfort allowed and reference could be made here of the view that early weight bearing promotes fracture healing could have been made. It may be the associated factor of the early full weight bearing in addition to the hypermetabolic state of pregnancy that promoted early healing?

I also think a comment on the complications of cast application when pregnant e.g. increased DVT risk would be appropriate.

In the final messages:
I do not think the authors can conclude that in all cases of pregnancy there is accelerated bone healing from this solitary case report but certainly the case would appear to present possible difficulties in the management of pregnant patients with orthopaedic injuries.

What next?: Revise and resubmit

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