Author's response to reviews

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

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Author's response to reviews:

1. "the first reported case" has been revised to "a case of".

2. "after delivery of the baby" has been revised to "postpartum".

3. I think the commonest long bone to be fractured is actually the radius. This has been changed to:
   "Tibial fractures are the second most common long bone to fracture"

4. 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. This has been changed to:
   "Operative management has similar complications and additional ones such as wound infection, osteomyelitis and fat embolism"

5. In the third paragraph the introduction will be made clearer by commenting that the hormones mentioned are increased during pregnancy.
   "which are all increased in pregnancy" has been added to end of sentence.

6. 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.
   This has been changed to:
   "This lady probably mobilised fully weight bearing as comfort allowed in the plaster cast, as touch weight bearing would have been unrealistic for someone weighing 135kg. Early weight bearing has been shown to promote fracture healing and this may also have contributed to accelerated fracture union.
   Kenwright et al compared two groups of rigidly fixed tibial shaft fractures, one
with no movement and one with axial micro movement at the fracture site (induced by weight baring). Time to clinical union and full weight baring was significantly less and fracture stiffness was greater in the micro movement group."

7. I also think a comment on the complications of cast application when pregnant e.g. increased DVT risk would be appropriate. This has been addressed and mentioned in the 2nd paragraph:

"Our main concern regarding the non-operative management in a plaster cast was the increased risk of a developing a deep vein thrombosis."

8. 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. This has been changed to:

"Long bone fractures in pregnancy require clear and precise management plans as fracture healing is potentially accelerated."