Dear Editor,

Thank you for the opportunity to publish our article in your journal – please find attached a revised manuscript along with this response to reviewer’s comments, hopefully satisfactorily addressed below.

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| **Reviewer Comment/Question** | **Response** | **Action** |
| Was origin of pain confirmed by local infiltration? | The non-union site is not amenable to reliable local infiltration as pain is secondary to mechanical instability | Added to methods and patients, line 85-87 |
| It is not clear what surgical approach was in the two failures (cases with ongoing pain) and in the case complicated by haemorrhage | A Stoppa approach was used in all three cases. We would not classify these as failures as union was achieved and mechanical symptoms resolved in all cases (ln 212), it was groin symptoms that deteriorated, secondary to joint pathology (ie not pelvic instability). | Clarified in resultsLine 202Line 213-216 |
| With regard to the false horizon (and possible neurovascular damage), the authors do not describe whether this is different in the two described approaches | This is different and was the justification for adopting an ilioinguinal approach in one case. | Already in ‘Surgical technique’ ln 165-167 |
| I wonder why a postop CT was not used to confirm union? | Buttock/mechanical symptoms resolved in all cases and radiographs demonstrated signs of union. Given both clinical and radiological evidence of union, CT is not felt to be justified  | Added to discussion.Lines 278-280 |
| How was defined that symptoms related to pelvic instability resolved (despite ongoing groin pain?) | Clinical assessment of patients – improvement in mechanical symptoms and associated union. Groin pain of articular origin presumed not to be improved by stabilising the pelvis  | Clarified line 212 |
| I miss a report/discussion on prevalence of FAI syndrome. Especially in patients with pincer like deformities (high CE) FAI might be a factor in ongoing pain after PAO. One might also might also hypothesize unusual forces from FAI to be involved in non-union or stress fractures after PAO. | We are not sure there needs to be a discussion on FAI syndrome, when all cases were performed for dysplasia. Non-union and stress fractures are much less likely when PAO is performed for FAI (ie acetabular retroversion) because there is much less separation at the superior pubic ramus osteotomy. FAI is not a factor in increased forces causing the stress fracture; the explanation of these stress fractures is very clear in the article (Japanese finite element modelling paper). | We have emphasised that all patients in this series received PAO for symptomatic dysplasia (not FAI).Line 98-99Line 233 |
| I would consider not to discuss the D insufficiency: It is not evident whether this is a factor of outcomes in this series. (Besides that, I miss cut-of values for definition of vit D insufficiency, and also post op vit D levels are not reported). | Vitamin D and serological bone profile is a routine part of the work up of these patients and we do not operate until this is felt to be corrected. It is acknowledged that Vitamin D correction cannot be shown to be  | We have removed the part of the discussion relating to Vit D correction.  |
| A paragraph in the discussion part of the manuscript, mentioning the limitations of the study  |  | Limitations paragraph added.Line 274-280 |
| A more robust discussion revealing the clinical importance of your findings would add to the value of the manuscript |  | Additional paragraph lines 238-242 |

We hope the revised manuscript addresses the suggestions made satisfactorily and look forward to hearing back,

Kind regards

Alex Shearman