Author’s response to reviews

Title: Post-traumatic fulminant paradoxical fat embolism syndrome in conjunction with asymptomatic atrial septal defect. A case report and review of the literature.

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Author’s response to reviews:

Cover letter
giving a point by point response to the concerns:

Comment by the reviewer Sunil V Furtado:
The presentation and discussion point towards embolism across the ASD which may be hard to ignore even though emboli can reach the systemic circulation through pulmonary pre-capillary shunts and the pulmonary capillary bed.

In a situation where a patient is intubated for surgery, changes in right atrial pressures can shunt air/fat across an ASD or for the matter even an innocuous patent foramen ovale.

This has been substantiated by studies in neurosurgical patients as elucidated in this article:
Patent foramen ovale and neurosurgery in sitting position: a systemic review.

Authors comment:
This comment is absolutely correct, and we know this important article.

However, the article is a review about patients in sitting position, and therefore absolutely different to our patient situation. We have had done trauma surgery in a supine position without neurosurgical intervention.

Comment by the reviewer Sunil V Furtado:
The recommendation that intramedullary nailing should not be performed in patients with right to left cardiac shunts lacks credibility in the absence of broad statistical data.

Authors comment:
This is correct. However, the maximum pressure measured during the reaming of the medullary cavity in preparation for a femoral intramedullary pin reach
400-500 mmHg, therefore we recommend plating of femoral fractures instead of nailing in cases with ASD.

Comment by the reviewer Sunil V Furtado:
The phrase that is the first report of CSF in a patient operated for fracture femur is irrelevant and needs to be changed.
Authors comment:
We have changed the text:
For the first time in the literature, We present the case of a patient……

Comment by the reviewer Sunil V Furtado:
An image of the ASD or flow across the ASD on Echo would add value to the article:
Authors comment:
We have no intraoperatively flow across the ASD on Echo in this case.

Comment by the reviewer Sunil V Furtado:
Figure 3 has been labeled as a CT image whereas it is a T2 weighted MR image:
Authors comment:
Thank you very much, we have changed the legend figure 3.

Comment by the reviewer Sunil V Furtado:
Quality of written English: needs some language corrections before being published:
Authors comment:
We had done a complete correction of the language.

Comment by the reviewer Rupert Ketterl:
What type of osteosynthesis should be performed in such cases (external fixator or femur plating):
Authors comment:
We recommend plating of femur, therefore we have changed the conclusion.

Comment by the reviewer Rupert Ketterl:
Could you give us a suggestion concerning the time of the operative treatment:
Authors comment:
We have had done surgery immediately after trauma management.

Comment by the reviewer Rupert Ketterl:
Which management could you suggest to avoid the described complication:
Authors comment:
In cases with ASD, we recommend plating instead of nailing.

Comment by the reviewer Rupert Ketterl:
Please correct the typing mistake in line 56, 97 and 138:
Authors comment:
Thank you very much, we have correct the mistakes.