Author's response to reviews

Title: Pseudopancreatitis on CT in a Patient with Isolated Blunt Head Trauma

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Author's response to reviews: see over
The Biomed Central Editorial Team

Object: MS: 1983570945868028 - Pseudopancreatitis on CT in a Patient with Isolated Blunt Head Trauma. Dr. Ah-Ling Cheng et al.

Thank you for your consideration of our manuscript for publication in your journal, Journal of Medical Case Reports.

We have reviewed the manuscript and made the appropriate changes according to your reviewer’s comments.

Reviewer #1 (Dr. Chiara Dobrinja)

1. page 2 line 11: “isolated” should be deleted and the Authors should specify that the pancreatic enlargement was without parenchymal pancreatic laceration or duct injury.

   - Done

2. page 2 line 17: the Authors should describe, if is exact, that no evidence of pancreatic haematoma or contusion were found at the abdominal exploration.

   - Done

3. page 2 line 19: “unexpected” should be replaced by “occult”

   - Done

4. page 3 line 6: please specify the references reporting the rarity of isolated pancreatic injuries.

   - Done: a total of three references were specified.

5. page 4 line 5: “computed tomography” should be replaced with “total body computed tomography”

   - Done

6. page 5 line 5: the first dosage of amylase levels were a little elevated (248 U/L). There are others serial laboratory findings showing ulterior amylase levels increase? If yes, specify. Same for serum lipase levels.
Bloodwork was not repeated for amylase levels during the patient’s admission to hospital. However, a repeat lipase level was obtained approximately 6 hours after the initial lipase was drawn. The repeat lipase level was within normal limits at 10 U/L.

These findings were added to the manuscript.

7. page 5 line 9: The authors should give the time elapsed between the trauma and surgical intervention.

- Approximately 28 hours elapsed between the trauma and surgery, which was included in the manuscript.

8. page 5 line 20: the Authors describe that there aren’t clinical or biochemical findings of acute pancreatitis, but I’m not completely agree. Clinical evaluation of the patient was very difficult because she was a unconscious/comatose patient and also is not true that the laboratory tests on pancreatic function were normal.

- Manuscript was revised to clarify the term “pseudopancreatitis” is being used in the situation where there is a history of trauma, but no direct abdominal trauma.
- As the reviewer accurately identified that clinical evaluation was difficult due to patient’s extensive head injury, and that the amylase level was slightly elevated, “clinical or biochemical findings of acute pancreatitis” was removed from the manuscript.

9. page 6 line 7: In the discussion section, the Authors suggest various causes of the isolated pancreatic abnormality (overhydration, pancreatic trauma). I think that some more hypothesis can be described, also if improbable, like the pancreatic contusion, the biliary pancreatitis. There was stones in the gallbladder at the CT? The bile duct was dilated? there were material in the stomach? Please specify.

- Although CT is not the modality of choice for gallstone imaging, there were no gallstones seen on CT. There was no biliary duct dilatation. These findings were included in the manuscript. As well, the possibility of gallstone pancreatitis was added under “Discussion” section.
- As pancreatic contusion was felt to fall under the spectrum of traumatic pancreatic injury, it was not added under a separate consideration.

10. page 7 line 12: the Authors should describe also the role of magnetic resonance of the abdomen with or without secretin to detect pancreatic duct injury.

- Done

Reviewer #2 (Dr. Fikri Abu-Zidan)

1. This most probably a classical Grade I pancreatic injury (Traumatic pancreatitis). This should have been directly suspected from the CT scan (Fluid around the pancreas). The patient had a front impact collision wearing a seatbelt. The
patient was unconscious. Otherwise the only finding will be only epigastric tenderness. Being a trauma surgeon dealing with these cases on daily basis, I personally do not find any thing new in this case. The authors should clear evidence supporting their alternative theory.

- In particular we would like to thank reviewer #2 for his or her astute comments. A radiographic appearance compatible with a type I or type II pancreatic injury in the absence of a mechanism that corroborates pancreatic trauma is precisely the reason we feel this case is important. It is worth re-emphasizing that the only identified injuries were related to the penetrating head wound. The absence of any non-windshield vehicular damage or any evidence of a deceleration injury such as a lap belt sign as well as the vehicle being found with the transmission in park combined with the absence of physical findings to corroborate blunt abdominal trauma is what convinces us that a non-traumatic mechanism of pancreatic injury is at play. We firmly believe the mechanism of injury should be considered akin to a gunshot wound to the head in which case the unanticipated identification of pancreatic injury through possible but yet unclear mechanisms is what makes this case unique.

- To further clarify that this was a patient was an isolated head injury and there was no mechanism or other evidence for abdominal trauma, we have made changes to the manuscript to re-emphasize that there was a high-velocity object through the patient’s windshield, that emergency responders felt the patient had pulled her car over to the side of the road and stopped her vehicle (given that the transmission was in park and that apart from the windshield damage, there was no other vehicular damage). We have also added to the manuscript that there was no lap belt sign on physical examination.

Again, to the Biomed Central Editorial Team, thank you for your time and consideration.

Sincerely,

Ah-Ling Cheng