Author's response to reviews

Title: Temporal fossa arachnoid cyst presenting with contralateral subdural hematoma following trauma-two case reports

Authors:

Promod Pillai (promod.pillai@osumc.edu)
Sajesh K Menon (sajesh@aims.amrita.edu)
Raju P Manjooran (raj_manjooran@yahoo.co.in)
Rajeev Kariyattil (rajeev@aims.amrita.edu)
Ashok B Pillai (brashok@aims.amrita.edu)
Dilip Panikar (panikar@aims.amrita.edu)

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Author's response to reviews: see over
To
Michael Kidd, editor-in-chief
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Occurrence of contralateral subdural hematoma/effusion with temporal fossa arachnoid cysts following trauma -Report of two cases by Promod Pillai, Sajesh K Menon, Raju Paul Manjooran, Rajiv Kariyattil, Ashok B Pillai, Dilip Panikar

Dear Sir
Thank you very much for considering our study for publication in Neurosurgery. We would also like to thank the reviewers for providing us with constructive comments. We have revised the manuscript according to the reviewers’ comments and we have provided an itemized point-by-point response to their comments. All the changes in the manuscript are indicated with underline.

Reviewer comments and responses
1. The title is somewhat misleading, as both patients had bilateral extracerebral effusions/haematomas, not only on the contralateral side. This should be reflected in the title.
   The title is now changed to Temporal fossa arachnoid cyst presenting with bilateral subdural hematoma/effusion following trauma-two case reports

2. The references are rather old – the average age is 10 years. The references used for sidedness and distribution of intracranial arachnoid cysts (AC) are not the most relevant. I would recommend a new literature search using the terms “arachnoid” AND “cyst” AND all the following terms: “sidedness”, “location”, “distribution”, “gender”, “temporal fossa”, “middle fossa”.
   We have performed a new literature search and some of the recent relevant references were now included.

3. The 2 papers referred to by Mori and Parsch do not say anything about the risk of contracting a CSDH in cyst patients; only that about 2 – 2,5% of all CSDH patients harboured an AC. We have recently published an article on the matter; see Wester K, Helland CA. How often do chronic extra-cerebral haematomas occur in patients with intracranial arachnoid cysts? J Neurol Neurosurg Psychiatry. 2008 Jan;79(1):72-5.
We have now included the study Wester K, Helland CA. How often do chronic extra-cerebral haematomas occur in patients with intracranial arachnoid cysts? J Neurol Neurosurg Psychiatry. 2008 Jan;79(1):72-5 in the reference list.

4. The authors claim that the haematomas are called by tearing of bridging veins. That is nothing but an assumption, not a fact. See the above reference for alternative mechanisms.

We have revised the discussion incorporating the alternative mechanisms.

In a recent study by Wester K et al, the incidence of chronic subdural or intracystic haematomas was reported to be 4.6% of all the patients with intracranial arachnoid cyst, referred for treatment. The authors proposed two mechanisms leading to formation of subdural haemorrhage. The cyst membrane is loosely attached to the convexity dura, the mechanical forces that are sustained during a moderate head trauma can cause the cyst membrane to be detached from dura, and thus cause a bleeding episode. Secondly, the parietal cyst membrane also covers the area where the bridging Sylvian veins, or the veins that traverse the membrane, unsupported by brain tissue, enter into the dural venous sinuses behind the sphenoid ridge. Even a moderate manipulation of the parietal membrane can disrupt these veins, leading to bleeding into subdural space.

5. They also state that “a trivial trauma has caused rupture of the arachnoid cyst”. How do they know? There is no evidence of such a cyst rupture.

6. Figure 3 C and D both show a bilateral hygroma AND a haematoma. Therefore it is misleading to say (in the figure legend) “…, an ipsilateral subdural hygroma (3C) and a contralateral subdural hematoma (3D)”. The figure legend should instead read: “…, an ipsilateral subdural hygroma and a contralateral subdural hematoma (3C and D)”.

We have revised the discussion in accordance with reviewers comments.

We have revised the figure legend as Figure 3-(Case 2) Computed tomographic scan of the head without contrast showing an arachnoid cyst in the right temporal fossa (3A&B), an ipsilateral subdural hygroma and a contralateral subdural hematoma (3C&D).

7. Reference #9 is irrelevant and should be omitted, as it has nothing to do with the topic. That article describes a haematoma caused by an aneurysm rupturing into a co-existing AC.

This reference is omitted.
We appreciate your and the reviewers’ feedbacks and look forward to your decision.

Promod Pillai, M.Ch.
Department of Neurological Surgery
The Ohio State University Medical Center
032 Hamilton Hall, 1645 Neil Avenue
Columbus, Ohio 43210
Telephone: 614-247-4640
Fax: 614-247-2332
E-mail: promod.pillai@osumc.edu