Author's response to reviews

Title: Huge extradural hematoma with mild symptoms in a patient with arachnoid cyst (Case report and review of the literature)

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Version: 4 Date: 18 August 2011

Author's response to reviews: see over
Author's response to reviews

Title:
Huge extradural hematoma with mild symptoms in a patient with arachnoid cyst (Case report and review of the literature)

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Version: 2 Date: 18 August 2011

Author's response to reviews: see over
Reviewer's report
Referee 1: Reviewer: banu prakash

Title: Asymptomatic presentation of huge extradural hematoma in a patient with arachnoid cyst (Case report and review of the literature)
Version: 1 Date: 24 June 2011
Reviewer: banu prakash

Comments:

1. the title of asymptomatic should be changed as the patient was symptomatic
   • We changed the title and omitted the word "asymptomatic"

2. indication for CT in trivial trauma in patients with abnormal skull shapes also should be restricted to symptomatic patients because many might have minor bleed which wouldn't need intervention until unless we need to document for medico-legal severity of injury and compensation.
   • We revised our sentence and advocated that the abnormal shape and size of the head should be considered an indication for CT scan in patients with mild head injury even with subtle symptoms in emergency units.

3. the differential of porencephalic cyst is more striking than an arachnoid cyst as the ventricle seems to communicate, please show the other images. pre op or follow up MRI would characterise the cyst as it would show on diffusion if it is loculated or communicating with ventricle. I would prefer to do MRI instead of CT as in India it is not difficult to get MRI time slot, so that we can avoid radiation while we get more information in conscious patients.
   • We noted that our patient was in poor financial state and could not afford Brain MRI due to the high price in our country so we could not perform pre or post op MRI. We saw the arachnoid membrane during the surgery and we also obtained a biopsy as presented in figure 3 and the pathologist report was compatible with arachnoid membrane.

4. please include corresponding cuts in pre and post op images, date of the study in the image.
   • We noted in the figure legends that Fig 1 showed pre-op CT scan with hematoma and Fig 2 showed post op CT scan.

5. the description of chronic EDH is w.r.t bleeds without associated cyst, so subacute bleeds are totally hyperdense because the serum get absorbed from the surrounding. since the pressure head from dural side is not high due to high
yielding cyst it persists in the collection to give this variegated picture, so this is still a subacute bleed. MRI could have been better to age the bleed. hope you could feel at craniotomy for the EDH wouldn't have popped out like other cases

- As noted above the patient could not afford brain MRI due to the high price in our country.

**Quality of written English:** Acceptable

**Declaration of competing interests:**
'I declare that I have no competing interests'

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**Reviewer’s report**

**Refree 2**
**Reviewer:** Cara Sedney

**Comments:**
This is an interesting case report describing an unusual presentation of a large epidural hematoma in a patient with an arachnoid cyst. The case is well described and the radiographs are impressive. The literature is well-reviewed of other previous cases. In addition, the authors make the worth-while recommendation to obtain radiographic imaging of patients with an abnormal head shape after minor trauma. Several things should be added/changed:

1. Did the grade II papilledema resolve after evacuation of the hematoma?
   - Yes it resolved and we mentioned that in the paper.

2. What specific mechanisms or predisposing factors can the authors propose for this bleed to occur epidurally rather than the much more common subdural or intracycstic bleeds?
   - As mentioned in the paper, the head shape of the patient was abnormal and during the surgery we noticed that the source of bleeding was of venous origin and may be explained by lack of the buffering of the brain parenchyma to seal the epidural space. The head impact was also mild which resulted in venous rather than arterial bleeding. Of course more cases should be studied to find the proper pathophysiology. The abnormal head shape might be considered a predisposing factor.

3. Several spelling errors should be corrected: "yeard" in the Case Presentation section, as well as "brain computerized scan" which should probably be "computed tomography scan". CBC should not be abbreviated. There should be a period after "no neuroradiological investigation had been performed".
   - We corrected all the wrong dictation errors.

4. Although the English is understandable, the quality of the article would be greatly improved by some revisions of a native English speaker to help with
Reviewer’s report Refree 3

Comments:
I read with interest your case report concerning:
“Asymptomatic presentation of huge extradural hematoma in a patient with arachnoid cyst
(Case report and review of the literature)”
To my knowledge and to an adequate review of the literature you provide, this is an extremely rare presentation of an extradural hematoma on a background of a huge arachnoid cyst.
The importance of your report is related solely to the rarity of this presentation. However, I believe that the term “asymptomatic” should be excluded from the title and the manuscript. This is NOT an asymptomatic case since the symptoms of a progressive headache, vomiting and unresponsiveness to pain medication in addition to the congenital alterations of the skull circumference and form in this patient led to the process of a more extensive workup and finally identifying the hematoma. Thus, “asymptomatic” is not the cornerstone of this case report but the rarity of the presentation is. The authors should be more cautious in stating so in the manuscript. Alternatively the term “mild symptoms” or “non-comatose patient” should be used.

- We revised the title as requested.

In the discussion section, there is an effort to characterize this case according to chronicity. I believe that that term chronic that you finally accept for this case is not true. The presentation of the hematoma is within 72h as you state and chronicity, definley has to do with a longer interval. I think that Bradley’s classification is more fit and based on a more scientific and objective background. The key fact in your presentation is that you identified that the source of this hematoma was a meningeal vein. Venous blood tends to clot more quickly than the arterial blood due to longer intervals of stasis and the compressible properties of the veins whenever pressure increases at their walls. The appearance of this hematoma in neuroimaging and the intraoperative findings (motor oil appearance) are consistent with a venous hemorrhage and should be commented on this ground even if the findings are similar to chronic hematoma. The time frame or presentation does not permit us to call this a “CEDH”. In this respect I believe that this discussion part should be rewritten to avoid any confusion.
As we mentioned there are different opinions and various classification regarding the chronicity of extradural hematoma. We reviewed the literature and summarized different opinions in the paper. We mentioned that during surgery the epidural hemorrhage had motor oil appearance consistent with chronic bleeding and in our case, EDH was diagnosed 72 hours after the head trauma. This time period is consistent with the Sparacio’s study [Ref: 27] who defined the chronic epidural hematoma as 48-72 h after trauma.

There are some minor grammar and syntax errors, “yeard” instead of “years”, “very huge” instead of just “huge”.

We revised the paper as requested.

**Quality of written English:** Needs some language corrections before being Published

- We revised the paper as requested.

**Declaration of competing interests:** We declare that I have no competing interests

Response to Editorial Office

- Please include a Patient Consent section, which should be worded in the following manner:
  "Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal."

- We added the Patient Consent Section.

2. Please remove the additional files as these are not needed for publication.
  - We removed the additional files.

2. Please reformat the authors contribution section.
  - We reformatted the section.