Author’s response to reviews

Title: Endoscopic Repair of Lateral Sphenoid Encephaloceles: A Case Series

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Reviewer reports:
Brad E. Zacharia (Reviewer 1): Dr. Gore presents his series of endoscopic endonasal repairs for lateral sphenoid encephaloceles. Given the relative rarity of this pathology, this is a respectable series. The basic demographic and clinical data is provided and a description of the varied repair techniques are noted. The author argues that alloderm inlay, fat graft and nasoseptal flap repair was superior to alternative repairs. The very small number of patients renders true statistical analysis uninformative. I do not believe true conclusions regarding the efficacy of one versus another repair method are possible in this series.

I agree that it is difficult to establish a true statistical analysis with such low patient numbers and have included a statement in the conclusions section of the manuscript (conclusions section, line four) to that effect. I do think the statistical analysis, while it must be viewed critically given the low patient numbers, does help to emphasize the utility of the multilayered approach for lateral sphenoid encephalocele repair at least in one author’s hands.

The images are of moderate quality and fail to truly demonstrate the techniques described.

Unfortunately, the images were the best available given the limitations of the equipment available at the hospital where the procedures were performed. I agree that sequential intraoperative photographs would be more helpful, and will consider obtaining a more sequential series of intraoperative images in future cases.
Given the other series (large and small) that exist in the literature, this study adds very little.

Of the most recent published papers on lateral sphenoid encephaloceles, two are single patient case reports, one is also a seven-patient case series, and one is a twenty-three patient case series over 10 years. I feel that case series, however limited in patient numbers, can be of benefit for such a rare disorder, as it facilitates systematic reviews, meta-analysis, etc.

Vijay Pothula (Reviewer 2): This is a retrospective case series of small number of cases of 7. Four of these were successful with the method described using Alloderm inlay, fat obliteration and naso septal flap.

Ahmed Sweed (Reviewer 3): This paper addresses an uncommon problem which is lateral sphenoid sinus encephaloceles management. There has been several publications discussing this problem with various surgical techniques. The author here presents his experience in the management of these cases. The paper is generally well written and adds further confirmation of the best management of these cases using an endoscopic multilayer repair.

I would like to raise a couple of points for revision. In the results section the author presented his statistics concluding that there was a significant difference in favour of using alloderm inlay vs onlay techniques. There was only one case done using the onlay technique in this series and accordingly it would be difficult to conclude with confidence that the inlay technique would provide better outcome. The author does recognise the impact of the small number of this series, but I would suggest adding a statement in the conclusion section to clarify this point.

In the conclusions section, line four, added statement “Given the low patient numbers overall and the low number of onlay-only patients it is difficult to draw definitive conclusions from this limited case series.”

The author states that there was a learning curve with failure in cases 2 & 3 and none in the last 4 cases (Page 6, line 6). I would suggest revising this statement as it suggests that the failure of
these 2 cases was related to the learning curve which contradicts the conclusions of the author regarding the different surgical techniques used in the repair of the defect.

Page six, line 6 (under discussion section) I have removed the line discussing the learning curve so as not to conflate or confuse a possible learning curve effect with the repair-type effect.