Peer Review File

Article Information: https://dx.doi.org/10.21037/ajo-21-44

Reviewer A:

1. This is a small study, with a single observer, and does not add to the literature
    - I agree that this is a small study. It is a single observer as not every surgeon in our unit is able to commit to performing FEES in patients with laryngomalacia pre-operatively.
    - FEES is still not a routine in many centers despite the literature describing dysphagia and silent aspiration as a potential complication that may persist. This study aims to add to the literature in terms of its usefulness to diagnose, treat, counsel family, as well as follow up, even after the airway symptoms have resolved.

2. Furthermore a very similar study by the same author with a larger number of patients was published in this journal in February 2021(Dysphagia after suprglottoplasty, Wertz, Ha, et al AJO Feb 2021.
    - The prior study by Wertz et al was to describe change in diet and swallowing function after supraglottoplasty. This was a retrospective study which looked only at the surgical group. In addition, VFSS was the main objective study which may not be practical in all the patients (eg solely breastfed infants) and may subject them to multiple radiation exposure if repeated studies are needed.
    - The current study is a prospective study, looking at both surgical as well as non surgical patients to assess dietary modifications and swallowing function. FEES was the main objective study for assessment.

Reviewer B:

1. Lack of numbering

- This has now been added

Introduction:

2. I would like a paragraph in the introduction with regards to the knowledge gap in the literature that the author is attempting to answer. What don't we know about dysphagia associated with laryngomalacia and its treatment. Why has the author written this paper?

- This has been added on page 5, from line 11 onwards: "***14-88% of patients with laryngomalacia***…"

3. The patient cohort is biased as it is drawn from a ENT swallow clinic. What proportion of all children seen with LM over the study period were referred to this clinic? What was the indication for the children to be referred to this service? Given this patient population were likely not all the children with LM it can't describe the incidence of dysphagia in LM as is stated as an aim (unless all Lm was referred to this clinic). This may need more information in the method section and to be mentioned in the discussion.

- Unfortunately there is no way to calculate this short of going through all the patient files for every single ENT clinic during the study period which is not practical. There is no uniform method for referral to be seen at our hospital. Patients can be seen in any consultant clinics, as well as registrars and fellow's clinic, as well as on the ward.
- Additionally, as explained to Reviewer A's question 1, not every surgeon in our unit is able to commit to performing FEES in patients with laryngomalacia per-operatively for a variety of reasons.
- When a patient with laryngomalacia was seen in my "general clinic" I would perform the FEES and have them followed up at the swallow clinic so they can be seen concurrently by the speech pathologist, rather than attending two separate appointments. Additionally, any patient with laryngomalacia that was discussed with myself by the registrar or fellow during clinic or when I was on call would have FEES performed by myself. Sometimes, patients appear on my operating list for supraglottoplasty that I have not assessed before and I will organize for them to be seen pre-operatively if no FEES was performed.
- This has been addressed in **Methods** on page 5, line 22: "referred to the paediatric otolaryngology ***service seen by the author***..." as well as in **Limitations** on page 15, line 11

"the main limitation of this study is the small sample size and ***it is a single surgeon's patient cohort***."

Method – Baseline Assessments:

4. Please include a reference for the thompson severity scoring system

- This has been added as reference 15 on page 6, line 6.

5. Diet modification levels - this may need better explanation early in the paper or a reference to paper or a table?

- This has been added as ***reference 17*** on page 6, line 11, in reference to the International Dysphagia Diet Standardisation Initiative's framework.

Method - Post operative assessments:

6. FEES only on clinical need -this means some were missed - only picked up the worst? Limitation needs discussion in limitations.

- This limitation was discussed in **Limitations** on page 16, line 19. A sentence was added: "***A more uniform repeat FEES***…"
- As it is distressing for the child and parents, unless they were found to be silent aspirators or had worsening dysphagia, when the laryngomalacia symptoms resolved and the child is thriving, it is difficult to justify FEES and VFSS.

7. The lack of standardisation of the followup assessment requires discussion in the limitations. Those managed conservatively also didn't have consistant assessment. No mention in the methods with the management of the conservative patients.

- A sentence in **Limitation** on page 16, line 22 has been added to address the lack of standardization: "**There is no uniform follow up interval**…"
- Management of the patients to include both surgical and conservatively managed patients has been clarified in **Baseline Assessments** on page 6, last paragraph, line 17 onwards.

Results

8. There are a lot of results presented and I wonder if the author can present these in a more concise manner. Very little raw data is provided for the reader to be able to interpret for themselves. Given there were only 20 patients in the cohort I would like to see some of the results presented in tabulated form.

- Table 1 and 3 has been combined and expanded to become the new table in to include the raw data of the entire population population and referenced throughout the manuscript:
    - Page 9, lines 15 (original), line 19, 22 & 23.
    - Page 10, lines 3, 14 & 20.
- Table 5 has been removed and expanded instead in **5.1 Dyspahgia**, page 11, line 4 onwards.
- Table 6 has been removed and expanded instead in **5.1.2 Dysphagia & Oral Aversion**, page 11, line 21 onwards.
- Table 7 has been removed and expanded instead in **5.1.3 Dysphagia: Follow Up Period**, page 12, line 5 onwards.

Results – 2.1 Laryngomalacia characteristics

9. "interesting" doesn't belong in results - results should be objective and shouldn't include interpretation

- This has been removed from page 8, line 18.

10. What are the laryngeal signs of reflux that were used?

- This is now defined in **Method's Baseline Assessments** on page 6, line 8-10 with reference 16 added: "***Endoscopic findings of laryngopharyngeal and or gastroesophageal reflux disease***…"

Results - 3.1.2 Supraglottoplasty Patients: Pre-Operative Swallow

11. 9 patients in group - but 1 didn't have FEES as emergent surgery. Thus 8 patients with pre op fees

- This is now clarified in the new table 1 with the raw data requested in question 8.
- This is also amended in **Limitations**, on page 16, line 18-19.

12. Not sure how to read table 1 - what is frequency? Total of 10 characteristics - is this out of a total of 8 and did one or more patient have more than 1 finding? 1/3 had normal (3/8) but this isn't present in the table. ? 6 patients had these findings?? Suggest this needs to be presented differently - The numbers are not a frequency.

- This is now clarified in the new table 1 with the raw data requested in question 8.

Results - 3.1.3 Supraglottoplasty Patients: Post-Operative Swallow

13. These pre and post surgical fees findings might be better represented in a table for the reader to interpret.

- This is now clarified in the new table 1 with the raw data requested in question 8.

14. The use of vFSS also appears arbitrary thus difficult to draw conclusions from. No data provided to reader to determine the relationship between FEES and VFSS.

- This is correct. Generally FEES is attempted first due to the long wait for VFSS as it is only done one day a week. This is explained in **Methods – Baseline Assessments**, on page 6, line 12-13.
- Table 1 presents the FEES and VFSS of the patients so the reader can see the relationships.

15. All these results could be presented for individual patients.

- This is presented in the new table 1 with the raw data as requested in question 8.

Results – 4.1 Conservative Patients

16. Once again the table with frequency is difficult to interpret. Given how few patients in this study the individual patient data could be presented for each patient.

- This is presented in the new table 1 with the raw data as requested in question 8.

17. Unlike the post surgical group there isn't a well defined followup FEES timeframe - ideally the conservative group should have had a followup fees at the same timeframe as the surgical group - ie 6 weeks - therefore not a defined followup schedule, this should be discussed in the discussion as a limitation.

- This has been added to **Limitations**, on page 16, line 19: "***A more uniform repeat FESS for the conservative group***…"

18. End of the study period - how long was that?

- This has been added in **Methods**, on page 5, line 23: "***The study period ended in January 2020.***"

Tables

19. Table 4 - chestiness post feeds - not sure what this means? Is this moist respiratory sounds post feeds? Should use the same terminology though out

- This has been amended throughout the manuscript on page 11, line 10, as well as the new table 2.

20. Table 5 - should have the raw numbers

- This has now been removed as suggested in question 8.

Discussion

21. This reads more as a review of the literature rather than a discussion of the authors key findings and how this relates to the literature. Consider organising paragraphs as: Summarise findings; Put findings into context; Recognise limitations; Implications moving forward.

- This has now been organized in each section in discussions to ensure it is easier to follow under the subheadings as:
    - **1.1 Pre-Operative Dysphagia** and
    - **2.1 Post-Operative Dysphagia**
    - **3.1 Limitations**
    - **4.1 Implications**
- The paragraphs as organized as summary of findings, followed by findings in context of the study in each of the sections.
- The GORD section has been removed.

22. I would like to read how the authors findings contribute to the literature and then feed back into patient care.

- This is addressed in the new section **3.1 Implications**, page 17, line 11 onwards

23. The conservative group was likely milder therefore not surprising they had better fees findings and improved quicker - may be worthy of discussion.

- This is now added in **Limitations**, on page 16, line 7-9: "***Patients are selected into the conservative group due to***…"

24. Should be noted that there is no validated scoring system for paediatric fees - very subjective (not to say not useful) - this may be worthy of mention in the discussion.

- This is now added in **Limitations**, on page 16, line 12-13: "***There is no validated scoring system***…"