



FACULTY OF
MEDICINE

LARYNGOPHARYNGEAL REFLUX CHARACTERISTICS IN CHILDREN:



AGE-RELATED DIFFERENCES BELOW AND ABOVE 6 YEARS OLD

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01 Background

- Laryngopharyngeal reflux (LPR) in children may impair growth, potentially leading to failure to thrive.
- It is more difficult to diagnose LPR in children due to **dynamic anatomy and physiology**.
- This study aimed to compare aerodigestive symptoms and nasopharyngolaryngeal findings in children with LPR across different age groups.

02 Materials and Methods

- Retrospective study of 10 subjects with LPR in children 1-6 years old and 10 subjects of LPR above 6 years old from a single tertiary hospital from November 2024 to January 2025.
- All subjects were evaluated through anamnesis and rhinolaryngoscopy.
- The symptoms were classified based on **respiratory symptoms** and **digestive symptoms**.

03 Results

Subject Characteristics

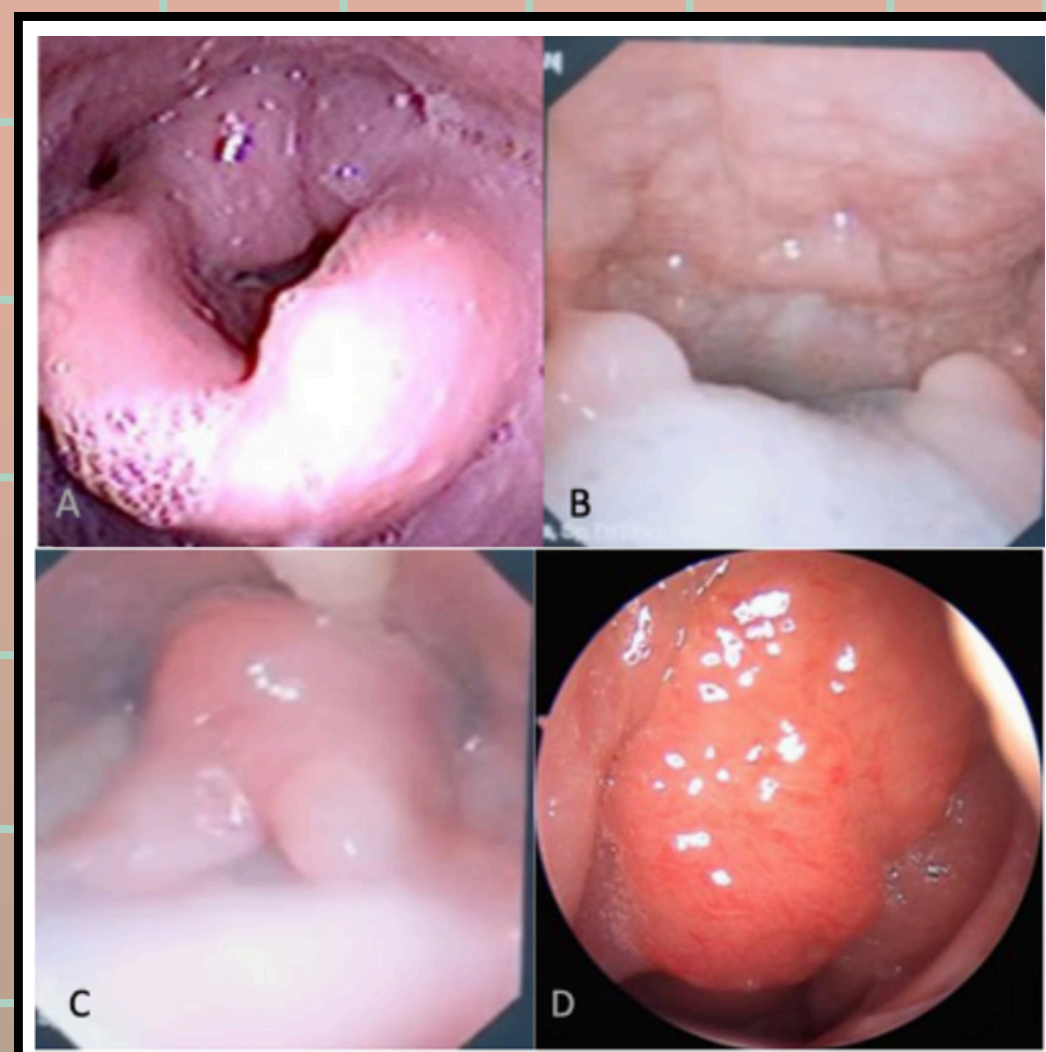
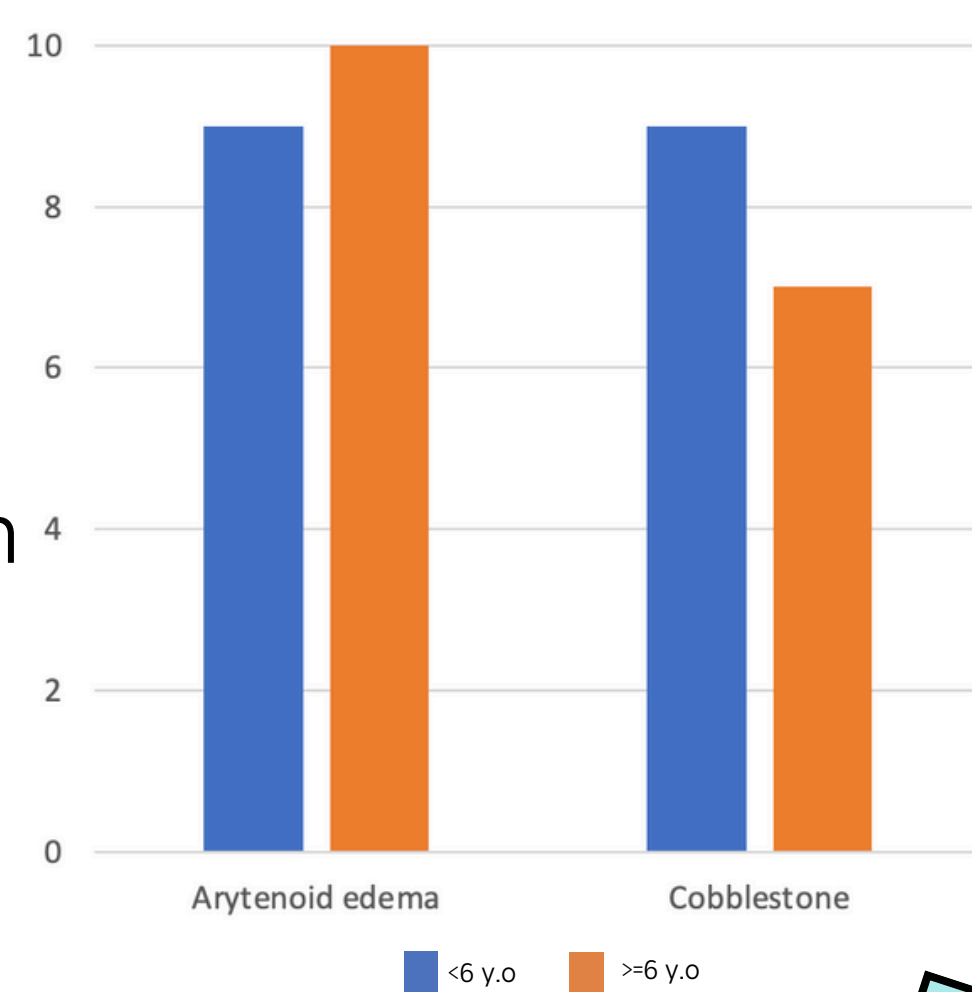
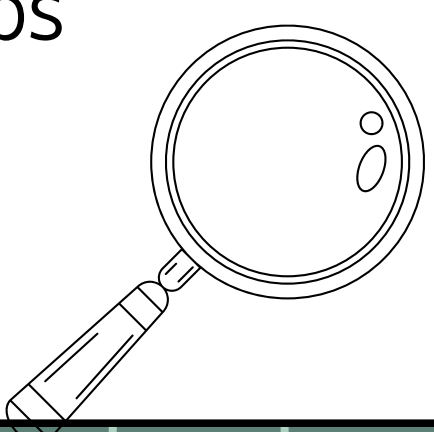
13 male (65%) | 7 female (35%) | 1-6 y.o. (10 Subjects) | >6-18 y.o. (10 Subjects)

15 (75%) subjects on LPR therapy

10 subjects (50%) with respiratory symptoms
8 subjects (40%) with digestive symptoms

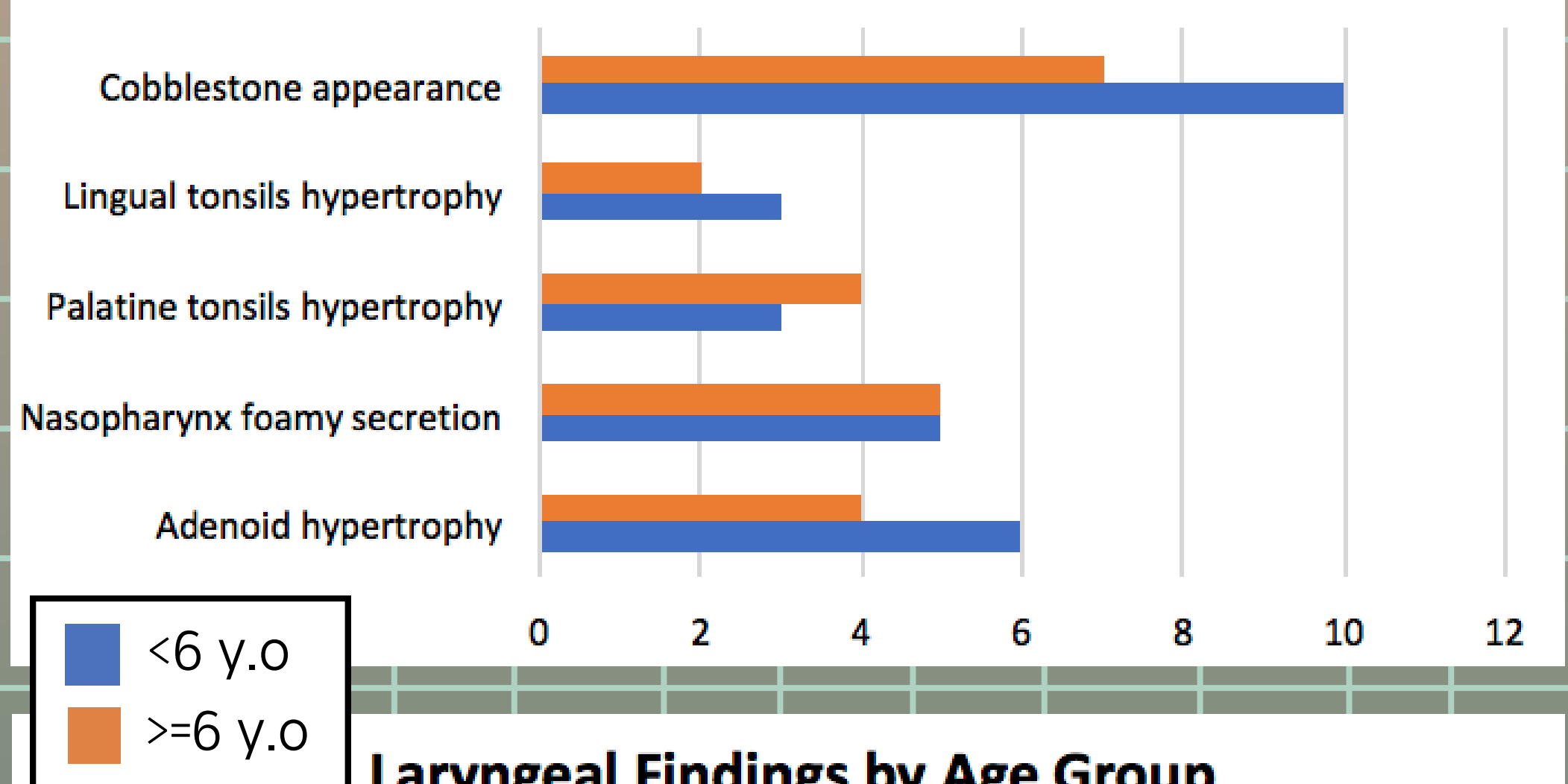
- For **children <6 y.o.**, **gastrointestinal symptoms are dominant (70%)** due to their still-developing digestive systems. In contrast, for **children >6 y.o.**, **respiratory symptoms are dominant (80%)** due to repeated exposure of stomach contents to the airways and vagal reflexes.

- Cobblestone appearance** and **arytenoid edema** are strong indicators for both groups

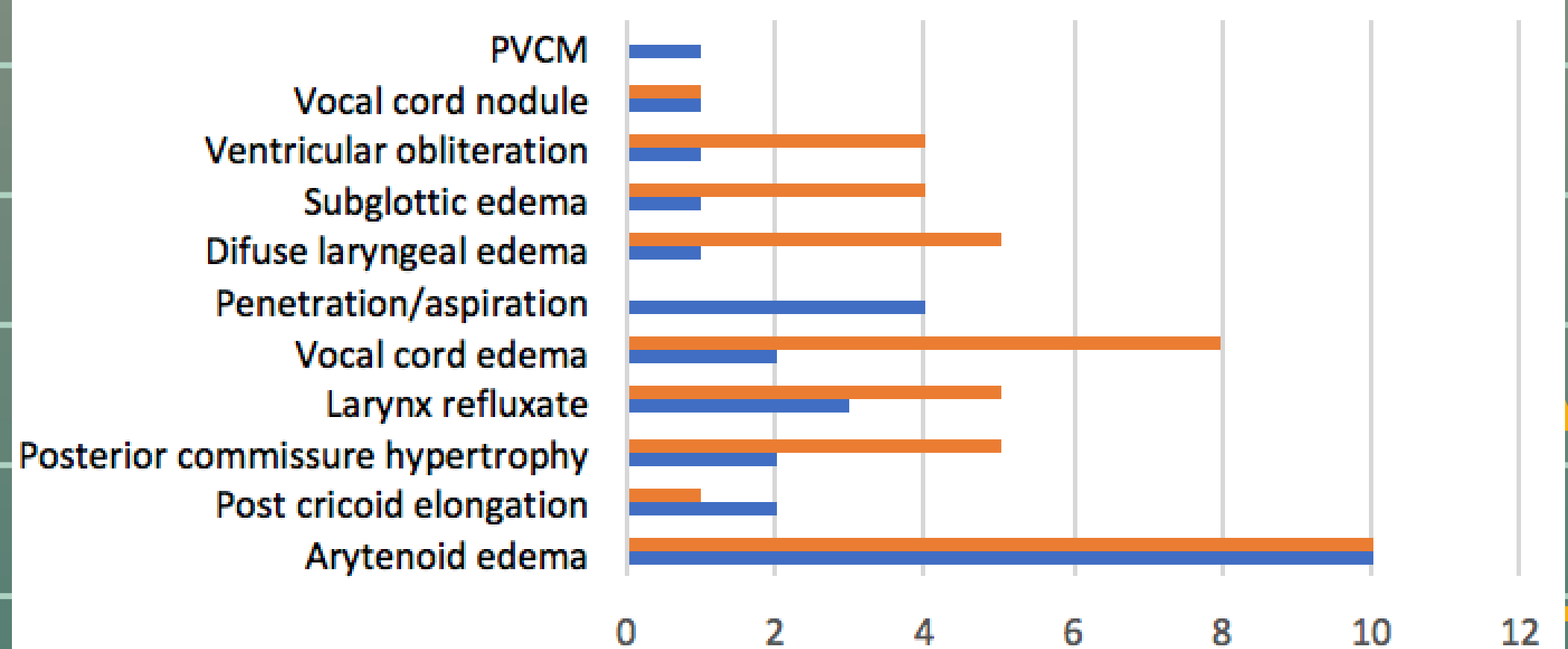


Picture 1. Objective findings:
A. Arytenoid edema;
B. Cobblestone appearance;
C. Post cricoid elongation;
D. Arytenoid hypertrophy

Pharyngeal Findings by Age Group



Laryngeal Findings by Age Group



04 Conclusion

These objective findings may serve as **potential phenotypes** for diagnosing **LPR in children** and should be further confirmed using multichannel intraluminal impedance to aid in the development of a pediatric reflux scoring system.