Subglottic stenosis: Endoscopic management and progression of disease

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INTRODUCTION

- Subglottic stenosis (SGS) is a principal cause of upper airway obstruction in the paediatric population.
- The management is challenging and controversial.
- Serial endoscopic balloon dilatation is an established technique.
- We sought to explore our experience in this regard.

RESULTS

- A total of 102 patients were identified with SGS with M:F 2:1.
- 10% had an anatomically normal airway.
- 51.3% of the grade I stenosis patients required serial incision & dilatation.
- Grade II & III patients were also serially incised and ballooned.
- The average number of procedures per patient is shown in figure 2.
- Duration from diagnosis to normal calibre subglottis is shown in figure 3.
- 9 Patients needed Laryngotracheal reconstruction.

METHODS

- Prospective analysis of paediatric airway database from a tertiary referral center was done.
- Electronic operation notes and discharge summaries were analyzed.
- Disease progression was closely monitored with repeat microlaryngobronchoscopy (MLB) in presence of the senior author every 3 to 4 months.
- Grades of stenosis was classified according to the Cotton-Myer grading system2,3.

DISCUSSION

- Subglottic stenosis is a common referral in Tertiary Pediatric ENT Practice.
- MLB is essential in the diagnosis and management of the condition.
- Higher grades of stenosis require closer observation and more procedures compared to the lower grades. Serial incision and dilatation prevents worsening of the disease.
- Serial endoscopic incision and balloon dilatation is an essential alternative to tracheotomy and more aggressive approaches.
- It is safe, less invasive, and carries low morbidity.

CONCLUSION

- In the management of Paediatric Subglottic stenosis multiple techniques varying from conservative to aggressive surgical reconstructions have evolved.
- We prove that methodical and serial endoscopic balloon dilatation is successful in safely managing majority of patients with SGS (figure 4).

REFERENCES