Surgical treatment or watchful waiting for infants and toddlers with congenital stridor.

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Introduction:
The standard approach to stridor in neonates and toddlers is usually watchful waiting, based on the expectation for self-limiting laryngomalacia (LM).

However, microendoscopic bronchoscopy (MLB) may reveal various pathology, which require a surgical treatment.

Methods:
Retrospective review of medical records and video documentation of MLBs of all patients below 2 years old, who presented with noisy breathing as their chief complaint, between 2010 and 2016.

Results:
Eighteen patients were identified – 13 (72.2%) males, 5 (27.7%) females, mean age 4.0 ± 4.4 months, range 1 day to 1.78 years. Eight (44.4%) of them were successfully treated surgically. The most common etiology of stridor was LM, as well as the most prevalent indication for a surgical intervention.

Discussion:
Neonatal airway obstruction due to laryngeal pathology can lead to significant morbidity and mortality or present as just a boresome symptom. MLB under spontaneous breathing appears to be a safe and effective method for evaluating the etiology of stridor and making clinical decision.

In our sample the incidence of LM is lower than reported by other studies (less than 50%) [1]. This is probably due to the fact, that the majority of the patients were primarily hospitalized in pediatric and intensive care departments and only later indicated for MLB. This results in a natural preselection of pathology, that differs from LM.

Nowadays, the indications for surgical treatment of congenital stridor are broader. Tradition holds that the majority of patients with LM resolve spontaneously by 12-18 months of age [4]. There is but clear evidence recommending early supraglottoplasty as advantageous compared to wait-and-see policy [6].

Conclusion:
Our results outline the importance of a more active management of stridor in infants and toddlers, given the significant proportion of the upper airway conditions that are amenable through surgery. Therefore, watchful waiting cannot be advocated before a thorough evaluation with MLB.

References: