Non-Infectious Pathologies of the Upper Airways

- Structural anomalies of the upper airways are part of the phenotype of patients with trisomy 21. They are responsible for an obstructive syndrome with early (<3 years of age) clinical expression, sometimes from the neonatal period onwards, and which varies according to the obstruction site. A stridor is the most frequent presenting sign but other forms of expression are possible, especially obstructive sleep apnea syndrome. These anomalies can also be clinically silent.
- Laryngeal and tracheal structural anomalies are more prevalent in patients with trisomy 21 than in the general population.
- Endoscopy of the upper airways enables diagnosis of the obstruction site in 75% of patients with trisomy 21, compared to in just 35% of the general population.
- Multiple obstruction sites, many associated aggravating factors, and association with congenital heart disease in 50% of cases.
- The 3 main diagnoses found during endoscopy are laryngomalacia (50%), tracheomalacia (33%) and bronchomalacia (21%).
- Acquired forms of subglottic and tracheal stenosis are more frequent than congenital forms and those linked to a narrow trachea in patients with trisomy 21. They can be prevented by adapting the size of the endotracheal tube.
- The importance of a complete annual ENT examination in children up to 10 years of age.

