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# Congenital Airway Malformations

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## Abstract

Congenital airway malformations comprise a broad spectrum of rare to common anomalies. These anomalies occur at various anatomic levels and manifest in a wide array of airway symptoms, with presentation significantly influenced by the level at which obstruction occurs as well as by the severity of obstruction. Given the distinctive anatomic features of the pediatric airway and the risk of airway symptoms rapidly progressing to life-threatening airway compromise, early recognition, diagnosis, and treatment of these anomalies are crucial. A

number of anomalies are self-limiting. The prevalence of congenital airway malformations has been estimated to range between 0.2 and 1 in 10,000 live births.

This chapter provides an overview of congenital airway malformations, progressing from the larynx to the distal airway. The most frequent congenital airway malformations are laryngomalacia, congenital subglottic stenosis, vocal cord paralysis, subglottic hemangioma, laryngeal clefts, tracheomalacia, congenital tracheal stenosis, and tracheal agenesis.

In light of the comprehensive nature of this topic, many of these complex anomalies receive only cursory attention.

## Keywords

[Congenital airway anomalies](#)

[Laryngomalacia](#)

[Tracheomalacia](#)

[Subglottic stenoses](#)

[Vocal cord paralysis](#)

[Laryngeal cleft](#)

[Laryngeal atresia](#)

[Tracheal agenesis](#)

[Tracheal stenosis](#)

[Subglottic hemangioma](#)

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