Acquired subglottic stenosis (A-SGS) represents one aspect of the multiple facets of intubation-related lesions that may damage the larynx. The term laryngotracheal stenosis (LTS) better reflects the glottic component of such lesions and should thus be used instead [1].

Ninety percent of all acquired LTSs result from post-intubation injuries [6, 10, 15, 24]. Since the introduction of long-term intubation for mechanical ventilatory support to newborns suffering from respiratory failure [2, 17], the incidence of LTS has declined from 8.3% in the 1980s to less than 2% in 2000 [8, 25]. Good tolerance of infant larynges to long-term ET intubation is attributed to the soft and pliable cartilaginous framework of the cricoid ring. This is due to the high fluid content of its cellular matrix [12]. With growth, the laryngeal framework becomes more rigid and partially ossifies at adulthood or after chronic injuries caused by ET tubes.

Other less frequent causes of laryngeal stenosis include iatrogenic complications resulting from endoscopic laryngeal interventions (such as inappropriate use of lasers and dilation) [7, 14, 18, 22], benign tumours [13, 26], external blunt or penetrating trauma [5, 11], caustic or thermal injuries [9, 20, 21, 23], chronic inflammatory disorders [4, 16] and idiopathic causes [3, 19].

References


