[NM-284] Acute stridor in a 19 year old due to acquired laryngocele after complex open airway reconstruction for severe subglottic stenosis

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19 year old girl who had complex open airway reconstruction for subglottic stenosis was admitted with new onset of hoarseness and stridor. She was trached all her life after 3 failed laryngeal repairs in her first 2 years of life 17 years ago. She had a t-tube after the open reconstruction for 3 months postop and was eventually decannulated. She presented shortly after decannulation with increasing stridor due to a complex air cyst in her left larynx. She was afebrile with stable vital signs and despite her voice changes not in any acute distress. She was scheduled for direct laryngoscopy and bronchoscopy under general anesthesia after admission.
An intravenous line was established after placement of a local anesthetic skin patch (Synera) and after a smooth mask induction of anesthesia with oxygen, nitrous oxide and sevoflurane, a dose of propofol was given to enable direct laryngoscopy and bronchoscopy while supplemental infusion propofol was provided. On examination it was evident that the hoarseness was due to a cyst like mass on the left side of the supraglottis pushing forward and narrowing the airway. Aspiration of the bulging mass revealed a small amount of thick mucoid appearing fluid and air and follow up CT was consistent with the diagnosis of an acquired laryngocele due to multiple surgeries of her airway. Since there was no further narrowing of the glottic area after the removal of the fluid from the cyst the plan was to extubate her and observe her with post –operative nebulization with racemic epinephrine and dexamethasone. She was extubated when awake lying on her side and breathing comfortably and discharged home the following day. Unfortunately the cyst recurred 2 weeks later and she required re-tracheotomy along with multiple staged laser excisions of the cyst. She is currently awaiting decannulation.