FP 36: Profile and Treatment Outcomes of Laryngo-tracheal stenosis in a Tertiary Private Hospital

More Hycel, Lim William
St. Luke's Medical Center, Bonifacio Global City, Philippines

ABSTRACT

Objective: To describe the profile and evaluate treatment outcomes of patients with laryngotracheal stenosis.

Background: Laryngotracheal stenosis is a complex airway problem. Tracheal resection with end-to-end anastomosis is considered the procedure of choice. An alternative to this open approach is endoscopic laser surgery with balloon dilatation.

Method: Cross-sectional study

Results: Twenty patients with laryngotracheal stenosis underwent 29 surgical procedures from July 2013-July 2018. History of endotracheal intubation was reported in 18 out of 20 cases (90%). Among the 20 patients, four underwent crico-tracheal resection while 16 (10 adult and 6 pediatric patients) underwent endoscopic surgery. Among these 16 patients, 10 underwent a single endoscopic procedure, while 6 required multiple procedures at an average of 1.5 procedures per patient, and an interval range of 2 weeks to 8 months. Overall rate of extubation or decannulation was 75%. Among those who underwent crico-tracheal resection, the rate of extubation was 100%, with time of extubation ranging from two to seven days. Among patients who underwent endoscopic surgery, the rate of decannulation was 69%, with time of decannulation ranging from three days to 1 year. Among pediatric patients, the rate of decannulation was 100%.

Conclusion: Laryngotracheal stenosis affects both adult and pediatric patients, most commonly due to intubation. Crico-tracheal resection with end-to-end anastomosis is a safe and effective surgical procedure in managing laryngotracheal stenosis. Endoscopic laser surgery with balloon dilatation is also effective yet minimally invasive surgical option especially for the pediatric age group, though it may necessitate multiple procedures prior to decannulation.