

Closure of a Traumatic Esophagomediastinal Fistula in a Child by Endoscopic Fulguration and Fibrin Injection.

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Abstract:

Posttraumatic esophagomediastinal fistula is an uncommon clinical entity that warrants surgical awareness due to its life-threatening potential. Its management, especially in previously operated field, is controversial and several endoscopic methods are being proposed as alternatives. Ours is the first report of endoscopic fulguration and fibrin injection in successful closure of such fistula. A 9-year-old female sustained complete tracheoesophageal transection from a gunshot wound to the neck and underwent immediate primary repair. She presented nine months later with fevers and swelling over anterior neck. CT revealed air tracking posteriorly to the dorsal neck and inferiorly to the mediastinum. Considering difficulty of open surgical approach, endoscopic intervention was attempted. Posterior wall fistula was identified via microlaryngoscopy above the esophageal anastomosis. The fistula tract was de-epithelialized via a Bugbee fulgurating electrode and then sealed with fibrin glue. Consequent imaging studies demonstrated complete occlusion of the fistula. Posterior posttraumatic esophagomediastinal fistula presents a challenging scenario from a surgical standpoint, as it combines difficulty of safe approach, high rate of injury to surrounding structures, and significant postoperative recurrence rate. Endoscopic Bugbee fulguration and fibrin glue injection are a safe and effective alternative to the traditional approach.