

EDİTÖRE MEKTUP/ LETTER TO THE EDITOR

An unusual complication of percutaneous tracheostomy: tracheoesophageal defect

Perkütan trakeastominin olağan dışı komplikasyonu: trakeaözofageal defekt

Adnan Taş¹, Hacer Taş²

¹Adana Numune Training and Research Hospital, Dept of Gastroenterology, ²Dept of Chest Diseases, Adana, Turkey

Cukurova Medical Journal 2018;43(1):258-259.

Dear Editor,

Percutaneous tracheostomy (PCT) have improved owing to interest in minimally invasive procedures but PCT has complications including vasovagal event, tube dislodgement and obstruction, hemorrhage, destruction to the recurrent laryngeal nerve¹. To our knowledge, this is the first case in the literature reporting the large proximal tracheoesophageal defect after PCT in a man with interesting endoscopic appearance.

A 15-year-old man with car accident presented to the emergency department. Physical examination was open fracture dislocation of T1 on T2 with complete transection of the spinal cord. The accident resulted in complete paralysis of both lower extremities. After wound irrigation and debridement, an open posterior reduction and stabilization was completed. It was appeared respiratory failure after operation and treated with mechanical ventilation. PEG feeding was considered because of the patient's nutritional intake inadequate for a period exceeding 2 weeks. First esophagogastroduodenoscopy examination was normal during PEG. The patient was discharged on postoperative 2 months in intensive care units. He presented to with severe cough and phlegm. Physical examination was rales of the right lower lobe. He was considered aspiration pneumonia associated to tracheoesophageal fistula. Second esophagogastroduodenoscopy examination was showed shortly after upper esophageal sphincter about of 2 cm long proximal tracheoesophageal defect (Figure). Repair of esophageal clefts was

planned but he died because of aspiration pneumonia.

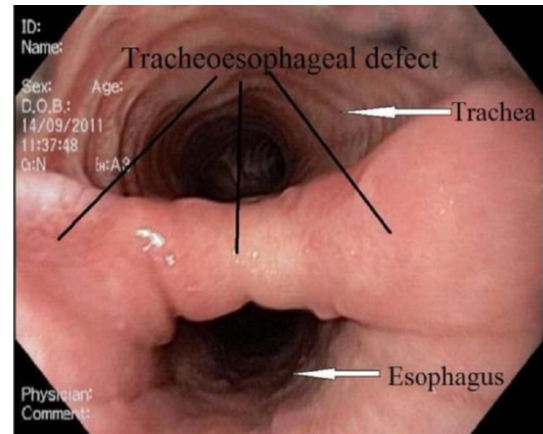


Figure 1. Proximal tracheoesophageal defect

PCT is performed to bypass airway obstruction¹. Although PCT is a safe procedure in intensive care units some complications may be occurred such as stomal infections, injury to the posterior wall of the trachea, subcutaneous emphysema, tracheoesophageal fistula, bleeding and pneumothorax^{1,2}. Injury to the posterior tracheal wall is fatal complication of PCT placement³. The incidence of posterior tracheal wall injury varies from 0.2% to 12.5%⁴. Our case has showed both posterior tracheal wall injury and anterior esophageal wall injury. These injuries may occur due to poor control of the guidewire and guiding catheter. In conclusion, proximal tracheoesophageal defect should be considered in patients with PCT with aspiration pneumonia.

Yazışma Adresi/Address for Correspondence: Dr. Adnan Taş, Adana Numune Training and Research Hospital, Department of Gastroenterology Adana, Turkey. E-mail: dradnantas@gmail.com
Geliş tarihi/Received: 23.10.2016 Kabul tarihi/Accepted: 29.11.2016

REFERENCES

1. Fernandez-Bussy S, Mahajan B, Folch E, Caviedes I, Guerrero J, Majid A. Tracheostomy tube placement: early and late complications. *J Bronchology Interv Pulmonol.* 2015;22:357-64.
2. Decker S, Gottlieb J, Cruz DL, Müller CW, Wilhelmi M, Krettek C et al. Percutaneous dilatational tracheostomy (PDT) in trauma patients: a safe procedure. *Eur J Trauma Emerg Surg.* 2016;42:605-10.
3. Feller-Kopman D. Acute complications of artificial airways. *Clin Chest Med.* 2003;24:445–55.
4. Trottier SJ, Hazard PB, Sakabu SA, , Levine JH, Troop BR, Thompson JA et al. Posterior tracheal wall perforation during percutaneous dilatational tracheostomy: an investigation into its mechanism and prevention. *Chest.* 1999;115:1383-9.