The tracheotomy procedure is considered to be a relatively safe surgical intervention for airway management. Indications for tracheotomy include:
- Pulmonary toilet
- Ventilator dependence
- Upper airway obstruction

Common complications:1-5
- Bleeding
- Mucous plug
- Accidental decannulation
- Tracheitis
- Granulation tissue
- Airway stenosis
- Tracheocutaneous fistula

Potential life threatening complications:1-10
- Tracheoinnominate artery fistula
- Tension pneumothorax
- Paratracheal abscess
- Mediastinal abscess
- Necrotizing fasciitis

Only two cases of a mediastinal abscess have been reported and in each case, there was an obvious source extending from the tracheostomy site.7-8 Here, we describe the first reported case of an isolated mediastinal abscess without any identifiable infection in the neck.

CASE REPORT

History of Present Illness: A 43-year-old man presented with severe respiratory distress.

Past Medical History: Alcoholic cirrhosis, idiopathic tracheal stenosis

Physical Examination: The patient was in obvious respiratory distress with biphasic stridor. Flexible fiberoptic laryngoscopy revealed almost complete occlusion of the subglottis.

Surgical Intervention: An emergent tracheotomy was performed without intraoperative complications.

Post-Operative Course: He developed fevers on post-operative day 9, but was otherwise asymptomatic. A fever workup was negative for any identifiable source of infection. Empiric treatment with broad-spectrum antibiotics was initiated. A CT scan of the neck, chest, abdomen and pelvis was obtained on post-operative day 14, demonstrating a 3X4 cm posterior mediastinal abscess (Figure 1). The patient was taken for bronchoscopy and video-assisted thoracoscopic surgery for drainage of the abscess. A CT scan of the neck one month after surgical drainage of the mediastinal abscess showed complete resolution of the infection (Figure 2).

DISCUSSION

Mediastinitis and Mediastinal Abscess

Causes:1-11
- Esophageal perforation
- Trans-sternal cardiac procedure
- Less common – deep neck space infection, hematogenous spread

Presentation:
- Fever
- Tachycardia
- Chest pain
- Leukocytosis
- Septic shock

Treatment:
- Aggressive surgical drainage
- Appropriate antibiotics
- Intensive care monitoring

Mediastinal Abscess From Tracheotomy (based on our presentation and two prior case reports)7-8

Timing: Late post-operative period

Symptoms: Fever, purulent drainage from tracheostomy stoma, sepsis

Diagnosis: Early suspicion, careful inspection of the tracheostomy stoma site, CT scan

Patients with tracheostomy and fevers of unknown origin may benefit from early imaging as delay in diagnosis of such severe infections can become life threatening.

REFERENCES