**Title:** Endovascular Management of Tracheo-Subclavian Fistula

**Objectives:** This is a report of tracheo-left subclavian fistula and its management. The literature describes one case of massive hemoptysis via a left subclavian artery fistula in the post mortem setting. Our case describes the successful management of this disease entity by endovascular intervention.

**Methods:** A 71-year-old female with oral squamous cell carcinoma presents with failure to thrive and poor oral intake following chemo and radiation therapy. During admission for PEG placement she developed an upper GI bleed requiring emergent tracheostomy. Four weeks later, she developed massive hemoptysis with tracheo-innominate artery fistula speculated as the cause. During median sternotomy, the left subclavian rather than the innominate artery was unexpectedly identified as the source. Bleeding was initially controlled with pledgeted sutures but the patient returned days later with small episodes of bleeding. CT angiogram of the chest revealed a left subclavian artery pseudoaneurysm which was subsequently excluded by placement of a covered stent.

**Results:** Post operatively our patient was without additional episodes of bleeding and was discharged with follow as an outpatient. A repeat CT angiogram of the chest revealed a well placed stent without evidence of migration or infection.

**Conclusions:** Tracheoarterial fistula is a rare complication of tracheostomy with an incidence of less than 1%. Survival of this disease entity is low and morbidity results from a major open operation in a high risk group. Due to its rarity, there are no guidelines on the approach to this problem but given the difficulty of controlling this problem via median sternotomy the placement of a covered stent maybe the best therapy. Initially, case reports showed a role for endograft placement as a temporizing measure but the risk of infection maybe sufficiently low to justify this approach as definitive therapy.