

## AB133. SOH22ABS008. A rare case of haemoptysis: a case presentation of aorto-bronchial fistula and review of the literature

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**Background:** Aorto-bronchial fistulas (ABF) is a rare presentation of haemoptysis. They are associated with several pathologies of the descending aorta. Rapid diagnosis and management as essential, as patients can present with a high mortality rate otherwise.

**Methods:** A systematic review using search of terms relating to ABF was completed, using both PubMed and Embase databases, in accordance with PRISMA guidelines. Papers were identified for inclusion if they were relating to the diagnosis and management of ABF and were written in English.

**Results:** This case describes a 58-year-old, with background of breast cancer and a previous coarctation of the aorta repair in childhood, who presented with new haemoptysis. CT Aorta demonstrated a saccular aneurysm, indicating a likely bronchial fistula at the site of coarctation repair. The patient underwent urgent thoracic endovascular aneurysm repair (TEVAR). Within the review, 100 studies were identified, with 20 studies included. Three were case series and 17 case studies. There was a median age of 69 and 34 (67%) were male. Forty-one (80%) patients presented with haemoptysis. Two patients presented with massive haemoptysis and were diagnosed on post mortem. Twentysix (51%) had open repairs, while 17 (33%) underwent TEVAR. Thirteen (25%) died post operatively, with mortality similar between surgical approaches. Data on long term outcomes was limited.

**Conclusions:** ABF must be considered as a differential for those with previous cardiac or aortic surgery, or bronchial stenting. Larger studies are required to ascertain incidence, mortality and long-term survival following repair.

Keywords: Aorto-bronchial; endovascular; fistula; haemoptysis; surgery

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## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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