1363 Oesophago-Pleural Fistula After Pneumonectomy; A Systematic Review

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Introduction: Oesophago-pleural fistula (OPF) is an infrequent but highly complex complication of pneumonectomy with a mortality of up to 63%. There is a paucity of data on the optimal treatment strategy.
Method: Systematic review was conducted in line with PRISMA guidance concerning OPF following pneumonectomy. Demographic, operative and management data were analysed.
Results: 30 full manuscripts of the 76 abstracts were included in the analysis. Data was limited to case reports or small series. In total, information for 58 patients was included. Median age was 59 years, with a median follow up time was 18 months. Most authors adopted sepsis control with chest drainage and pleural lavage and the mean number of interventions was 1.6. Overall mortality was 31% (18/58). There was no significant difference between the time to presentation following left (29.2+/-39.28 months) and right pneumonectomy (66.24+/-110.62) ($p = 0.2271$) nor any significant difference between successful outcomes following intervention for OPF after left (11/14) compared to right pneumonectomy (31/41) ($p = 0.8219$) or 90-day mortality ($p = 0.4571$). However, 26% of patients had synchronous broncho-pleural fistula and 90-day mortality was significantly higher in these patients (6/15 vs 6/43. $p = 0.0395$). 25 patients who underwent additional pericardial, oesophageal or a nodal resection or intervention at the time of pneumonectomy had a significantly reduced mean time to presentation with OPF (21.49+/-60.15 vs. 84.99+/-114.31. $p = 0.0148$) and a higher 90-day mortality (8/25 vs 3/32. $P = 0.0414$).
Conclusions: Major heterogeneity of management hinders the introduction of standardised guidance of post-pnuemonectomy OPF. An MDT approach involving Oesophago-gastric and Cardio-Thoracic Surgery is vital.