Aim To assess the utility and safety of respiratory physicians-led combined rigid and flexible bronchoscopy in the management of benign and malignant airway diseases.

Results Data was collected retrospectively from 59 patients from August 2018 until June 2023. 27 males, 32 females; mean age 62 years; range 23–90 years including a case of 24 week pregnant lady with severe sub-glottic stenosis.

Bronchoscopic interventions include 18 cases of tumour debulking (partial to complete) using coring technique, rigid forceps, balloon dilatation and Argon Plasma Coagulation (APC), 5 tracheo-bronchial stent placements (self-expanding metallic and silicone stents), 12 sub-glottic therapeutic balloon dilatations, 12 diagnostic bronchoscopy and endobronchial ultrasound (EBUS) guided nodal and or mass sampling, 3 endobronchial valve insertions, 3 therapeutic procedures to manage endobronchial bleeding, 3 foreign body removal and 3 bronchial dilatation.

No significant complications were noted apart from bleeding during the procedure which was managed by the use of APC, topical administration of 1 in 10,000 adrenaline and cold saline along with intravenous tranexamic acid.

Results Our review demonstrates that combined rigid and flexible bronchoscopy can be safely performed by trained respiratory physicians to manage complex benign and malignant airway diseases with no significant complications.

‘When the going gets tough’ – Difficult infection and non-tuberculous mycobacteria

POST-OPERATIVE INFECTIONS ARE ASSOCIATED WITH THE DEVELOPMENT OF AIRWAY COMPLICATIONS AND INCREASED MORTALITY IN LUNG TRANSPLANT RECIPIENTS

W Armstrong, P Casey, P Cameron, A McBurnie, N Varey, J Rigby, A Parry, J Parmar. Royal Papworth Hospital, Cambridge, UK

Introduction Post-transplant infections and airway complications are common and carry a significant morbidity and mortality. The development of airway complications significantly increase the risk of mortality post-transplant.

Method Patients undergoing lung transplantation at Royal Papworth Hospital from January 2017 and March 2023 were analysed with respect to donor demographics, transplant urgency, ICU length of stay post-transplant and post-transplant infections with the risk of developing airway complications. Logistic regression with a p value of less than 0.1 in association with mortality on chi square test were entered as independent variables and final clinical status (alive or dead) were entered as dependent variables.

Results 229 patients were analysed, and we found no association between sex, number of organs (single/bilateral), patient/donor age and transplant urgency level with the development of airway complications. Patients with airway complications had an average infection incidence rate of 3.54, this compares to an average infection incidence rate of 1.13 in those without airway complications. The difference of 2.41 between the two groups was significant (p value ≤0.001).

Conclusion There is a significant association between post-transplant infections and airway complications. Airway complications significantly increase the risk of mortality post-transplant. Optimisation of donor and recipient strategies to address organ preservation and microbiology should help to prevent this complication.