Background: Globally, rigid bronchoscopy is making a comeback owing to progress made in interventional pulmonology. However, there are reservations amongst local pulmonologists in adopting rigid bronchoscopy due to its perceived complications. The aim of this study was to assess the feasibility, safety and complication rates of rigid bronchoscopy under general anaesthesia using TIVA in a Peninsular Malaysia state tertiary referral centre.

Methods: Retrospective analysis of all patients who underwent elective diagnostic and therapeutic rigid bronchoscopy from 1st December 2011 to 30th September 2013 was performed.

Results: 114 rigid bronchoscopies in 91 patients were included. The median age was 54 years and 80 (70.2%) were male. Most patients were ASA I and II (77.6%) with an ECOG performance status of 2 or less (78.4%). The main indications were respiratory symptoms with abnormal radiological findings (74.6%), incidental abnormal radiological findings (9.0%) and tuberculosis-related complications (7.5%). Most procedures were diagnostic (73.8%) where endobronchial biopsy was the commonest procedure performed (65.2%). The overall rate of intra-operative complications was 30.1% (bleeding 16.3%, desaturation 5%, hypotension 11.3%) & post-operative complications was 7.5%. Only 3 cases required endotracheal tube insertion & mechanical ventilation for laryngoedema, severe bleeding & iatrogenic pneumothorax. There were no fatal complications in this analysis. The median recovery room time was 76.6 minutes and most cases were discharged within 24 hours post-procedure (81.3%). Complications occurred more commonly in cases with poor ECOG status (p=0.025). Other factors such as age, gender, ASA score, presentation, indications, location of lesion, diagnostic procedure and diagnosis were not associated with increased complications.

Conclusion: Our survey showed that rigid bronchoscopy under general anaesthesia using TIVA is safe, where complications were attributed to the bronchoscopic procedures and were reversible. The patients’ overall status should be assessed prior to the procedure and extra care should be given to patients with poor performance status.