

PREOPERATIVE DIAGNOSIS:, Airway stenosis with self-expanding metallic stent complication.,POSTOPERATIVE DIAGNOSIS:, Airway stenosis with self-expanding metallic stent complication.,PROCEDURES:,1. Rigid bronchoscopy with removal of foreign body, prolonged procedure taking two hours to remove the stent piecemeal in a very difficult and trying situation.,2. Excision of granulation tissue tumor.,3. Bronchial dilation with a balloon bronchoplasty, right main bronchus.,4. Argon plasma coagulation to control bleeding in the trachea.,5. Placement of a tracheal and bilateral bronchial stents with a silicon wire stent.,ENDOSCOPIC FINDINGS:,1. Normal true vocal cords.,2. Proximal trachea with high-grade occlusion blocking approximately 90% of the trachea due to granulation tissue tumor and break down of metallic stent.,3. Multiple stent fractures in the mid portion of the trachea with granulation tissue.,4. High-grade obstruction of the right main bronchus by stent and granulation tissue.,5. Left main bronchus was covered by the distal portion of the stent and was only being ventilated through the struts of the stent.,6. All in all a high-grade terrible airway obstruction with involvement of the carina, left and right main stem bronchus, mid, distal, and proximal trachea.,TECHNIQUE IN DETAIL: , After informed consent was obtained from the patient, he was brought into the operating field. A rapid sequence induction was done. He was intubated with a rigid scope. Jet ventilation technique was carried out using a rigid and flexible scope. A thorough airway inspection was carried out with findings as described above.,Dr. D was present in the operating room

and we conferred on operative strategy and agreed that the best of strategy would be to first dilate the right main bronchus, cauterize it to control bleeding and then piecemeal removed the stent from distal to proximal. This is the technique that was carried out in a painstaking fashion removing bits of the stent piecemeal with finally getting all of the visible stent out of the airway. It should be noted that Dr. Donovan and I felt that two of the metallic stents were probably in place but we cannot be sure because of the terrible anatomy and the fact that the stent pieces were coming out twisted metal in fragments. Nevertheless, all the visible stent was removed, and the airway was much better after with the dilation of balloon and the rigid scope. We took measurements and decided to place stents in the trachea, left and right main bronchus using a Dumon Y-stent. It was measured 18 mm in tracheal diameter and 14 mm in bronchial diameter. The right main stem stent was 2.25 cm in length, the left main stem stent was 3 cm in length and the tracheal portion was 9 cm in length. After it was placed, excellent placement was achieved with the proximal end of the stent 3 cm below the true vocal cords. The patient tolerated the procedure well and was brought to the recovery room extubated.