

Table 1. Results of surgery in patients with traumatic airway injuries

Study	No	Operative approach	Surgery	Mortality	Complications
Barmada (23)	7	R Thoracotomy: 5 L Thoracotomy: 2	L. pneumonectomy: 1 ML. lobectomy: 1 Segmentectomy: 1 Primary suture: 4	0%	Wound infection: 2 Sputum retention: 1
Rossbach (19)	32	Collar incision: 16 Collar+ sternotomy: 1 Sternotomy: 5 R Thoracotomy: 9 L Thoracotomy: 1	Primary suture: 23 Tracheostomy: 3 Primary anastomosis: 2 R pneumonectomy: 2 ML Bilobectomy: 1	6%	Pneumonia: 3 Suture granuloma: 2 Wound infection: 1
Cassada (39)	18	Collar Incision: 3 L cervicotomy: 5 Sternotomy: 1 R thoracotomy: 8 L thoracotomy: 1	Primary suture: 13 Tracheostomy: 2 Repair+ tracheostomy: 1 L. pneumonectomy: 1 Lobectomy: 1	5.6%	Sepsis: 2 BPF: 1
Mussi (47)	16	R thoracotomy: 5 Collar incision: 11	Primary suture: 13 Primary anastomosis: 2 Thyroid cartilage suture: 1	0%	Suture granuloma: 1
Hofmann (49)	18	R thoracotomy: 17 L thoracotomy: 1	Primary suture: 18	44.4%	Suture dehiscence: 1
Balci (48)	32	Thoracotomy: 19 Sternotomy: 2 Clamshell: 1 Neck incisions: 10	Primary suture: 25 Primary anastomosis: 6 RUL lobectomy: 1	21.8%	Atelectasis/pneumonia: 2/2 Prolonged air leak: 1 Bleeding: 1 Empyema: 1 Wound infection: 1 Airway stenosis: 3
Richardson (57)	60	Cervical incision ± sternotomy: all laryngotracheals and most tracheal Thoracotomy: 24 bronchial injuries and some lower tracheal	Primary suture: 8 (2 laryngotracheal) Primary anastomosis: 25 Bronchial reconstruction: 10 Pneumonectomy: 14 Delayed presentation: primary repair (1), resection and anastomosis (1), pneumonectomy (1)	13.3%*	Failed repair: 1 Phonation problems: 1 Airway stenosis: 5 Empyema: 3 (BPF in 2) Suture granuloma: 6 Pulmonary hypertension/cor pulmonale: 3 Respiratory insufficiency: 1
Gomez-Caro (70)	11	Cervical incision: 3 Thoracotomy: 8	Primary suture: 8 Primary anastomosis: 1 Tracheostomy: 1 R. pneumonectomy: 1	0%	
Koletsis (20)	22	Collar incision±partial sternotomy: 11 Thoracotomy: 11	Primary suture: 19 Primary anastomosis: 1 L. pneumonectomy: 1 ML bilobectomy: 1	4.6%	Airway stenosis: 1 Sepsis: 1 Phonation problems: 1
Carretta (63)	30	Transcervical-transtracheal: 13 Thoracotomy: 16 Transcervical-transtracheal+ thoracotomy: 1	Primary suture: 29 Primary anastomosis: 1	3.3%	Pneumonia: 3 Phonation problems: 2 Tracheo-esophageal fistula recurrence: 1

*75% for patients treated with pneumonectomy

R: right, L: left, ML: middle and lower, BPF: broncho-pleural fistula.