Thoracotomies: Indications, Results And Implications

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Objective: Thoracotomy is a major surgical procedure requiring a thorough understanding of cardiorespiratory mechanics and maintenance of very vital organ function during the postoperative phase, which requires a high dependency environment with full monitoring capabilities. The aims of this prospective audit is to examine the indications for and outcomes of thoracotomies carried out at a secondary level hospital and to highlight the possible problems and challenges facing thoracic surgeons.

Design: Prospective study.

Setting: Cardiothoracic Surgical Unit, Department of Surgery, Assir Central Hospital, Abha, Saudi Arabia.

Method: Ninety-four consecutive adult patients (Aged 12 years and over) admitted or referred to the Cardiothoracic Surgical Service and who underwent thoracotomies between October 1999 and January 2004 (53 months). Information documented included patients' names, age, sex, type and date of operation, type of general anaesthesia, postoperative complications and post operative analgesia.

Result: There were 72 males and 22 females (M:F = 3.3:1). The mean age was 40.8 ± 17.1 years (Range = 13 to 80 years). The indications were fibrothorax/encysted hydrothorax (effusion/empyema) 21 cases (22.3%); lung bullae and cysts (with or without pneumothorax) 17 cases (18.1%); clotted traumatic haemothorax/fibrothorax 10 cases (10.6%). There was no mortality in these three categories. The overall mortality in our series was 5.3%. Mortality was higher in emergency thoracotomies (12.5%) and in patients needing mechanical ventilation (26.7%). Mortality in the elective cases was 3.9%.

Conclusion: Infection and the management of inadequate initial treatment of lung infections, traumatic haemothorax and lung cysts and bullae predominate amongst the indications for thoracotomy in our environment. Mortality is highest among those patients needing emergency thoracotomy and those needing postoperative mechanical ventilation.

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