Can tube thoracostomy be better than open surgery in managing unresolved lung abscess?

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Abstract:

Introduction: Hundred years ago, mortality from lung abscess was about 75% of patients. Open drainage of lung abscess decreased mortality on 20-35% and with antibiotic therapy mortality drop on about 8.7 %. At the same time, progress in oral and dental hygiene declined the incidence of lung abscesses. Today, aspiration from oral cavity is considered the major cause of lung abscesses as well as poor oral and dental hygiene. Aim: We aimed at defining an algorithm for surgical management of lung abscess through different options. Patients and methods: This was a comparative study performed on all patients who were admitted to Assiut University Hospital-Cardiothoracic Surgery department with lung abscess all over the duration from September 2016 to December 2017, who meet the listed inclusion and exclusion criteria. The patients were divided into 2 groups according to surgeon’s selection: Group (A): were managed with intercostal tube and further conservative management. Group (B): were operated on via conventional Thoracotomy and underwent either segmentectomy, lobectomy or pneumonectomy. Results: The study was conducted on 42 patients, only 30 of which had reliable complete data. Group (A): consists of 20 patients (66.7%) were managed with tube thoracostomy and further conservative management. Group (B): consists of 10 patients (33.3%) were operated on via conventional Thoracotomy and underwent either segmentectomy, lobectomy or pneumonectomy. Drug Addiction was a very important variable to add to our study as it is a frequent cause of aspiration and it’s complications (10% of each group were drug addicts). There was a significant relation between complications and Charlson score of co-morbidity index (such as heart disease, AIDS, or cancer). The mortality in both groups was prominent mostly in patients who are older than 60 years and those who were presented and admitted for surgery with delayed referral or complicated by life threatening conditions such a pulmonary sepsis and acute renal failure. Conclusion: Tube thoracostomy in good way for primary management of lung abscess along with medical treatment in order to relieve toxemia and suppuration, limit fever and leukocytosis especially in large abscesses causing empyema or pyopneumothorax. Yet, patient age, delayed presentation and co-morbidities still contributed to mortality despite the surgical approach used.

Keywords:

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