Abstract

Objective: To assess results in patients with primary cysts and tumours of the mediastinum who underwent surgery. Methods: A retrospective single-centre study was undertaken into patients with primary cysts and tumours of the mediastinum who underwent surgery between January 1992 and December 2004. We analysed demographic data, clinical presentation, type of surgery carried out and procedure, lesion location and histological diagnosis. Predictive malignancy factors were also evaluated. Postoperative morbidity and mortality were noted, as was medium-term results. Results: 171 patients underwent surgery over a 13-year period; 73 female (43%) and 98 male (57%). Mean age was 40.3±19.7 years (20 days-78 years). A primary cystic lesion was present in 15 patients (9%). The primary tumours included thymic neoplasms (31%), lymphoma (22%), neurogenic tumours (16%), germ cell tumours (9%) and a miscellaneous group (13%). Malignant neoplasms were present in 78 patients (46%). The antero-superior mediastinum was the most commonly involved site to have a primary cyst or tumour (58%), followed by the posterior mediastinum (24%) and the middle mediastinum (18%). Symptoms were present in 68% of the patients and included chest pain (20%), fever and chills (13%), myasthenia gravis (11%), cough (10%), dyspnoea (10%), and superior vena caval syndrome (7%). Univariate analysis identified symptoms as a predictive factors of malignancy (p<0.001). Types of surgery carried out included posterolateral thoracotomy (64 patients), median sternotomy (51 patients), anterior mediastinostomy (27 patients), antero-lateral thoracotomy (18 patients), video-assisted thoracic surgery (9 patients) and mediastinoscopy (2 patients). Total excision was performed in 116 patients, enlarged resection in 8 patients, subtotal resection in 7 patients and biopsy in 40 patients. There was one postoperative death (0.6%). Follow-up was available in 165 patients (96.5%) and ranged from 34 days to 13.4 years (mean 5.7±4.0 years). Complementary treatment with chemo and/or radiotherapy was provided in 75 patients. Six patients had to be reoperated on for local recurrence (3) or metastasis (3) of the primary lesion. Fifteen patients died of their disease during the follow-up period. Actuarial survival at five years was 97.6% for benign lesions and 76.4% for malignant tumours. Conclusion: Results support surgical resection for benign lesions and an aggressive multimodal approach for malignant tumours.

Keywords

Mediastinal cysts, mediastinal tumours, general thoracic surgery.