Tracheal lipoma

C A BATES, J RAHAMIM

From the Thoracic Surgery Unit, Derriford Hospital, Plymouth

ABSTRACT A 50 year old man was found to have a tracheal lipoma two years after first noticing symptoms.

Tracheal tumours are rare. Symptoms of tracheal obstruction are similar to those of asthma and chronic bronchitis and delay in diagnosis is common.

Case report

A 50 year old man was referred to the chest clinic with a two year history of shortness of breath on exertion that had started after an influenza like illness. In the year before admission he developed a cough, which could last around 15 minutes and produce a small amount of white sputum. He never noticed haemoptysis. In the last eight months friends had said that his breathing was noisy and he noticed this at night, especially when lying on his right side. He had smoked 20 cigarettes per day until eight years ago and had been treated for repeated respiratory tract infections. He had a family history of asthma.

On examination he had inspiratory stridor but no other signs except for a small lipoma below his right costal margin. His peak expiratory flow rate was 480 l/min. At fiberoptic bronchoscopy a midtracheal polyp occluding 85% of the lumen was observed. A biopsy specimen was not taken in case bleeding caused complete tracheal obstruction.

The patient was referred for immediate surgery, and a broad based polypoid tumour, 2 cm in diameter, and two tracheal rings were resected (figure). Primary anastomosis was performed. Histological examination showed a benign lipoma. He made a full and uneventful recovery.

Discussion

In adults over half of the tumours of the trachea are malignant. Presentation is almost always delayed: the trachea has a large functional reserve and 50–70% of the lumen may be occluded before symptoms occur.¹ Symptoms include dyspnoea, dry cough, haemoptysis, substernal wheezing, stridor, and cyanosis. The chest radiograph is usually normal. Asthma or chronic bronchitis is wrongly diagnosed in most patients and this has even led to inappropriate assisted ventilation.^{2,3} The diagnosis should be considered in any patient with "asthma" or an exacerbation of "chronic bronchitis" that fails to respond to treatment as expected. Spirometry, high penetration chest radiography, and tracheal tomography may contribute to a diagnosis; bronchoscopy will confirm the diagnosis and may provide a histological diagnosis.

Address for reprint requests: Dr J Rahamim, Thoracic Surgery Unit, Derriford Hospital, Plymouth PL6 8DH.

Accepted 1 August 1989

Intrathoracic lipomas fall into five groups: endotracheobronchial, parenchymal, pleural, mediastinal, and cardiac. Endotracheobronchial lipomas arise from the submucosal fat of the tracheobronchial tree and are usually pedunculated with a narrow stalk; they may extend between the cartilaginous rings into the peritracheal tissues and may recur after endoscopic resection. Complete excision appears to be the treatment of choice. Tracheal lipomas are rare. In a review of reports published in English only three of 50 endotracheobronchial lipomas were in the trachea.⁴ There have been no further reports of tracheal lipoma; we believe that this case is the fourth.

References

- 1 Xu LT, Sun ZF, Li ZJ, Wu LH, Wang ZZ. Tracheobronchial tumours: an eighteen-year series from Capital Hospital, Peking, China. *Ann Thorac Surg* 1983;35:590–6.
- 2 Jay S. Case reports: Tracheal polyp. *Clin Notes Respir Dis* 1979;18:14–6.
- 3 Parrish RW, Banks J, Fennerty AG. Tracheal obstruction presenting as asthma. *Postgrad Med J* 1983;59:775–6.
- 4 Politis J, Funahashi A, Gehlsen J, et al. Intrathoracic lipomas. *J Thorac Cardiovasc Surg* 1979;77:550–6.

The lipoma and tracheal rings (posterior membrane missing).