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Late onset asthma?

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Case report

A 77 yr old male complained of shortness of breath with some wheezing during exercise and recurrent infections of the lower airways. His general practitioner treated him several times with antibiotics and bronchodilators without persistent success. After about 5 months he was referred to the out-patient clinic of the Department of Pulmonary Diseases. His dyspnoea worsened during exercise and in the cold. He produced a small amount of clear sputum daily which was on one occasion bloodstreaked.

He was a 30 pack-year smoker of cigarettes. His previous medical history revealed hypertension, myocardial infarction ten years earlier, hyperthyroidism treated with carbimazole and late onset diabetes mellitus.

Physical examination of the heart was normal, percussion of the chest was normal and, except for a few inspiratory crackles over the basal parts of both lungs, breath sounds were normal. Routine laboratory investigations were normal. The electrocardiogram showed an old anterior wall myocardial infarction, the heart rate and rhythm were normal.

A posteroanterior (PA) (fig. 1) and lateral (fig. 2) chest roentgenogram were made. A bronchoscopy was performed.

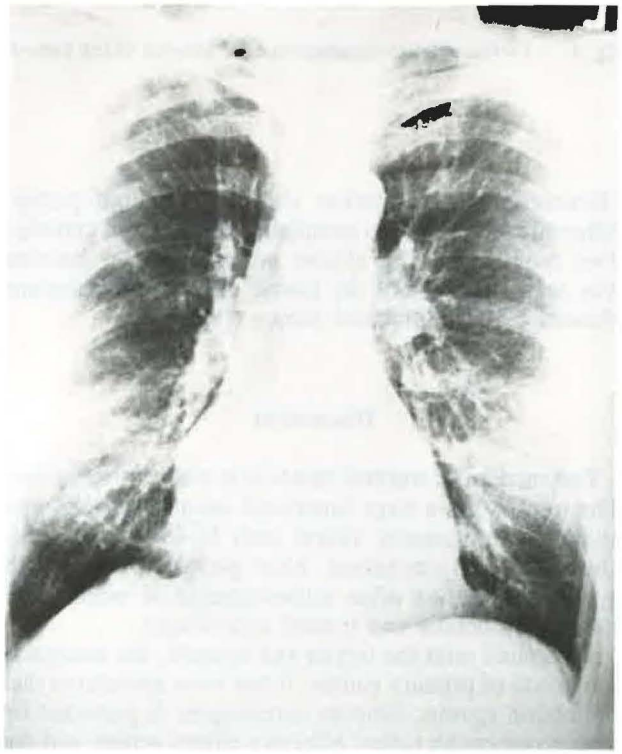

Fig. 1. – Normal PA chest roentgenogram, possibly some hyperinflation.

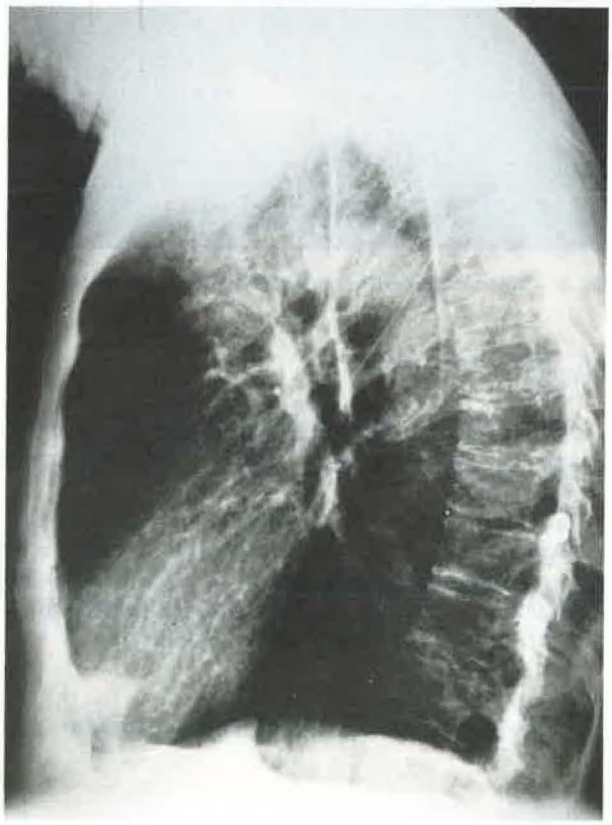

Fig. 2. – Lateral chest roentgenogram.

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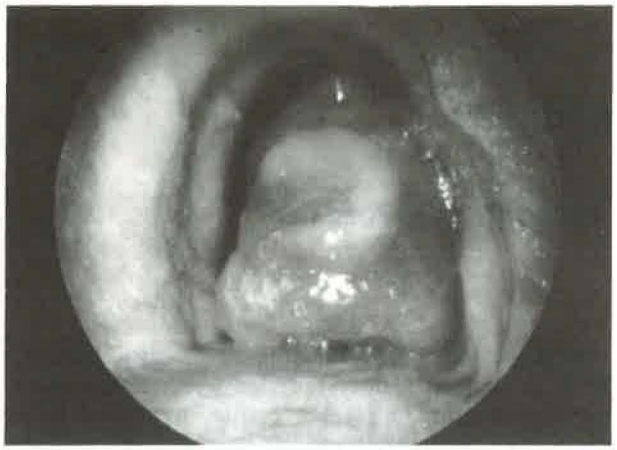

Fig. 3. – Endotracheal tumour, resulting in 80% obstruction of the lumen during expiration.

Fig. 4. – Normal tracheal lumen with almost normal mucosa.

Diagnostic procedure

On the lateral chest roentgenogram (fig. 2), a rounded process can be seen in the trachea, in the silhouette of the aortic arch.

During bronchoscopy a polypoid tumour was seen about 4 cm above the main carina with its base on the pars membranacea. The lumen of the trachea was considerably reduced, during expiration only about 20% of the normal airway size was left (fig. 3).

Diagnosis: (benign) endotracheal tumour

Treatment

A rigid bronchoscopy was performed under general anaesthesia and after coagulation of the base of the tumour by a Neodymium-yttrium aluminium garnet (YAG) laser the tumour was taken out by forceps.

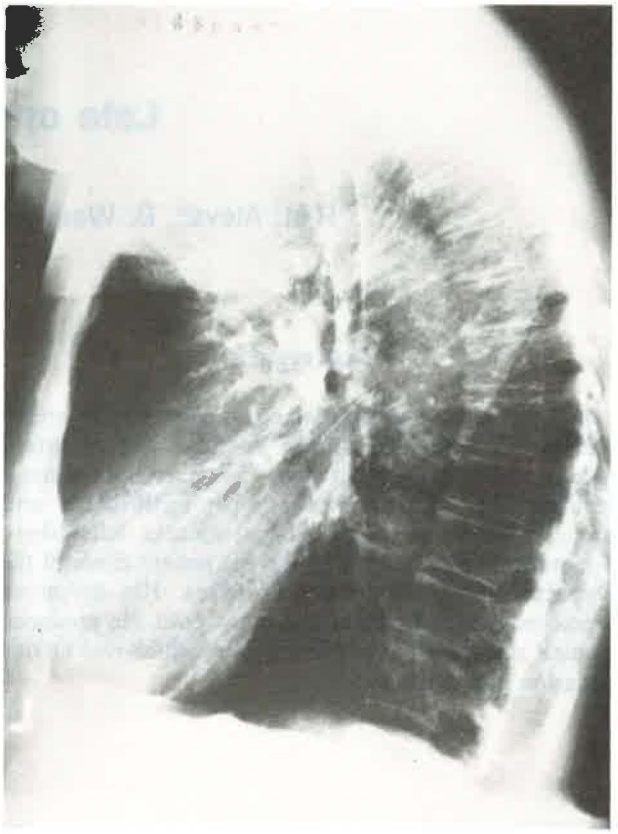

Fig. 5. – Lateral chest roentgenogram after removal of the tumour

Microscopic investigation showed a benign polyp. After this procedure the complaints disappeared entirely. Two months later an almost normal tracheal mucosa was seen (fig. 4) and the lateral chest roentgenogram showed a normal tracheal lumen (fig. 5).

Discussion

Presentation of tracheal tumours is almost always late. The trachea has a large functional reserve capacity and symptoms are usually absent until 50–70% of the tracheal lumen is obstructed. Most patients present with symptoms that are often misinterpreted as asthma and chronic bronchitis and treated accordingly.

Compared with the larynx and bronchi, the trachea is a rare site of primary cancer. It has been speculated that protection against airborne carcinogens is provided by a vigorous cough reflex, effective ciliary action, and the relatively large diameter. About half of the malignant tracheal tumours are squamous cell carcinomas, cylindromas are slightly less common. The incidence of benign tracheal tumours is difficult to ascertain, due to the varying nomenclature used [1]. Treatment of these

lesions by surgery is considered by some authors as the treatment of choice [2, 3]. On the other hand, endotracheal resection seems to be an attractive approach. Especially after the introduction of the Neodymium-YAG laser the possibilities have improved, as was also shown for benign endobronchial tumours [4]. One of the major advantages of this procedure is the low risk of bleeding after deep coagulation of the base of the tumour. By rigid bronchoscopy it is then possible to remove the polypous tumour as a whole for further investigation.

Keywords: Asthma; benign endobronchial tumour; YAG laser.

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ABSTRACT: A 77 yr old male was referred for dyspnoea and recurrent infections of the lower airways for the previous five months. On the lateral chest roentgenogram a process in the tracheal area was found, and during bronchoscopy a polypoid tumour was seen about four centimetres above the main carina. It appeared to be a benign endotracheal tumour which was removed after coagulation by a Neodymium yttrium aluminium garnet (YAG) laser.
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Asthme à début tardif? Un cast à diagnostiquer. R.M. Aleva, B. Wouters, J. Kraan, P.E. Postmus.
RÉSUMÉ: Un homme de 77 ans est adressé pour dyspnée et infections récidivantes des voies aériennes depuis cinq mois. Le cliché thoracique de profil montre un processus dans la zone trachéale. Au cours de la bronchoscopie, l'on observe une tumeur polypoïde à 4 cm au-dessus de la carina. Elle s'avère une tumeur endo-trachéale bénigne, qui fut enlevée après coagulation au moyen de laser Neodymium-YAG.
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