

SYNCHRONOUS TUMOURS IN PATIENTS WITH HEAD AND NECK CANCER

D J Houghton, Registrar, F Rapado, SHO, T B Duff, Consultant,
ENT Department, Royal Preston Hospital

CASE HISTORY

A 71 year old man presented in January 1994 with a seven-month history of left-sided otalgia and left-sided throat-discomfort which was aggravated by swallowing. He had lost two stones in weight over this period. He smoked 20 cigarettes and drank 12 units of alcohol each day.

On general examination he was frail and emaciated. Indirect laryngoscopy revealed a mass on the left lateral wall of the hypopharynx which extended inferiorly as far as the piriform fossa. This was clearly demonstrated by CT scanning (Fig. 1). On examination of the neck he had a firm, fixed, 2cm diameter lump in the upper part of the anterior triangle on the left side.



Fig 1 – CT Scan of larynx

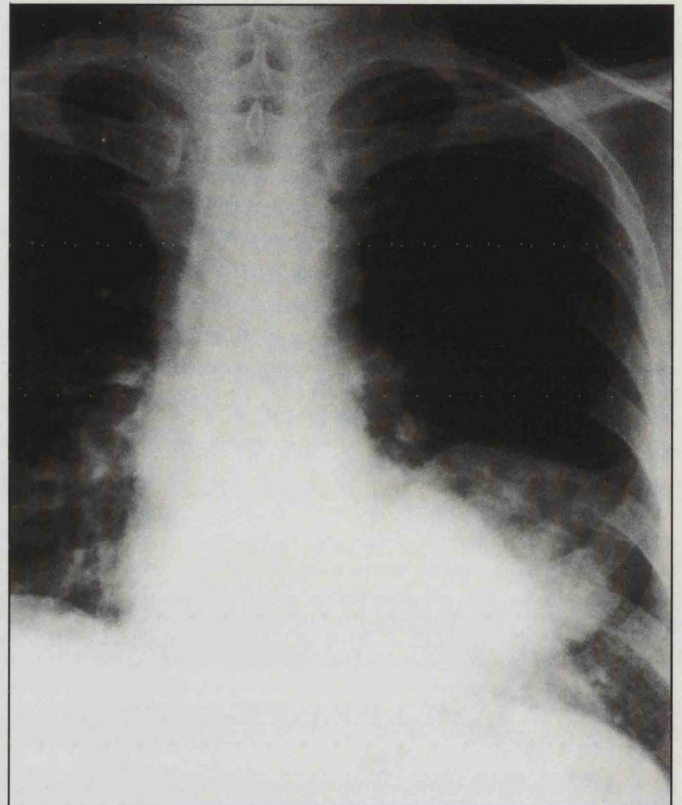


Fig 2 – CXR: Left lower lobe mass

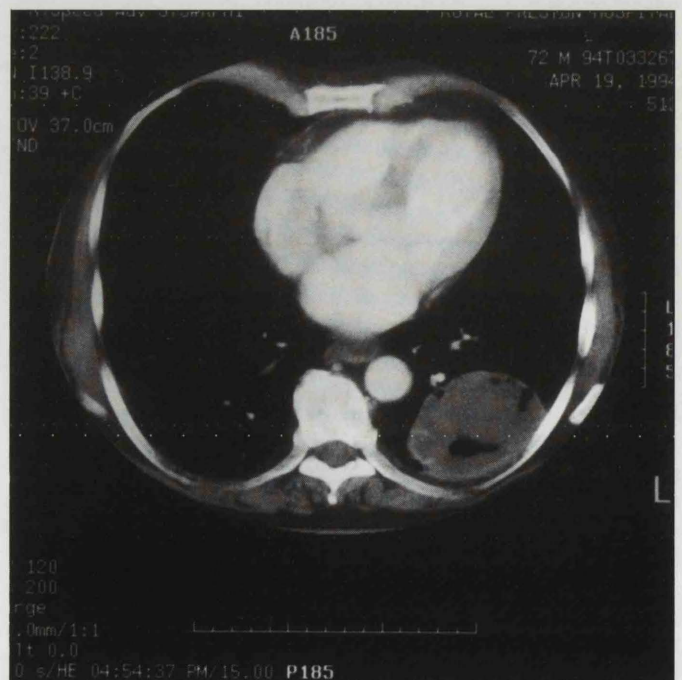


Fig 3 – CT scan of the pulmonary mass

Cytological examination of cells obtained by fine needle aspiration was suggestive of oat cell carcinoma. A chest X-ray performed at the time of presentation revealed a mass in the periphery of the left lower lobe (Fig. 2). This was confirmed by a CT scan (Fig. 3). The patient underwent panendoscopy which confirmed a squamous cell carcinoma within the hypopharynx. This was staged as T3N2a.

In order to reach a histological diagnosis of the pulmonary lesion, a CT-guided biopsy was performed. The sample obtained showed necrotic tissue only. It was decided that the most appropriate treatment was a course of palliative

radiotherapy which the patient underwent. He died shortly after this. A post-mortem confirmed the cause of death was bronchopneumonia. The lesion within the left lung was a squamous cell carcinoma.

DISCUSSION

Synchronous tumours in patients with cancer of the head and neck are most commonly found within the lung and oesophagus^(1,2,3). They are defined as being identified within 6 months of the patient's presentation and consist of both second primary tumours and distant metastases. The incidence in this group of patients is between 2% and 18%⁽¹⁻⁶⁾. An association exists between the site of the synchronous tumour and that of the primary head and neck cancer. Synchronous tumours of the lung are most commonly found with laryngeal primaries⁽⁶⁾, whilst oesophageal lesions follow primaries of the mouth and pharynx⁽²⁾. The value of panendoscopy in identifying these lesions is well established⁽²⁻⁵⁾. At present, we rely upon this technique and chest radiographs.

Chest X-ray and CT scanning in our patient showed a large lesion within the periphery of the left lung, which appeared neoplastic (Figs 2 & 3). Histological diagnosis of these lesions can be difficult. Several studies have shown that bronchoscopy is helpful in certain cases^(6,7) but we were unable to confirm the diagnosis using this technique. Percutaneous CT guided biopsy is a widely recognised technique for obtaining tissue samples. Unfortunately, again, this proved unsuccessful in this patient. Thoracotomy before treatment of the primary tumour of head and neck, has been performed in selected patients^(2,7). The results of long-term follow-up of these patients is unknown.

It was decided that the primary lesion in our patient was too advanced to warrant performing a thoracotomy for the pulmonary lesion and he underwent a course of radiotherapy to the tumour of the head and neck.

The post-mortem showed that the pulmonary lesion was a squamous cell carcinoma. It was not possible to determine from the histology if this was a second primary or a metastatic tumour. This case confirms the value of chest radiology in the initial assessment of patients presenting with cancer of the head and neck. It also underlines the difficulties that can arise in confirming the diagnosis of synchronous tumour. Knowledge of the presence of such a tumour drastically alters prognosis and may affect management.

There is now strong evidence within the literature which supports the role of panendoscopy in the initial assessment of all patients with head and neck cancer. Most ENT surgeons would advocate that a chest X-ray is also performed at the time of presentation. The value of these investigations in the long-term follow-up of these patients has yet to be

determined. A retrospective study of 170 selected patients with laryngeal cancer by Rachmat et al⁽⁸⁾ concluded that follow-up twice-yearly bronchoscopy was not a useful procedure. Over a seven-year period using yearly chest radiology, Engelen et al⁽⁹⁾ identified lung malignancies in 47 out of 556 asymptomatic patients who had previously been treated for laryngeal cancer. Unfortunately this did not lead to an overall increase in survival.

ACKNOWLEDGEMENT

Dr C Nicholson, Consultant Histopathologist, Royal Preston Hospital.

REFERENCES

- 1 Horijk GK, De Jong JMA. Synchronous and metachronous tumours in patients with head and neck cancer. *Journal of Laryngology and Otology* 1983; 97:619-621
- 2 Lau WF, Siu KF, Wei W, Lam KH. Prospective screening for multiple tumours of the upper aerodigestive tract: a simple routine procedure. *Laryngoscope* 1986; 96:1149-1153.
- 3 McGuirt WF. Panendoscopy as a screening examination for simultaneous primary tumours in head and neck cancer: a prospective sequential study and review of the literature. *Laryngoscope* 1982; 92:569-576.
- 4 Atkins JP, Keane WM, Young KA, Rowe LD. Value of panendoscopy in determination of second primary cancer. *Archives of Otolaryngology*, 1984; 110:533-534.
- 5 Gluckman JL. Synchronous multiple primary lesions of the upper aerodigestive system. *Archives of Otolaryngology* 1979; 105:597-598.
- 6 De Vries N, Snow GB. Multiple primary tumours in laryngeal cancer. *Journal of Laryngology and Otology* 1986; 100:915-918.
- 7 Leipzig B. Bronchoscopy in the staging and evaluation of head and neck carcinoma. *Annals of Otology, Rhinology and Laryngology* 1983; 92:373-376.
- 8 Rachmat L, Vreeburg GC, De Vries N, Hordijk G, Lubsen H, Manni JJ, Snow GB. The value of twice yearly bronchoscopy in the work-up and follow-up of patients with laryngeal cancer. *European Journal of Cancer* 1993; 29A:1096-1099.
- 9 Engelen AM, Stalpers LJA, Manni JJ, Ruijs JHJ, Van Daal WAJ. Early chest radiology in the early detection of lung cancer following laryngeal cancer. *European Archives of Otolaryngology* 1992; 249:364-369.