Oat Cell Carcinoma of the Oesophagus — A Case Report and Review of Literature

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A 45-year-old male presented with dysphagia, anorexia and progressive weight loss. He was a chronic smoker. Oesophagoscopy showed an ulceroproliferative growth of 25-30 cm size. Histopathology from the biopsy tissue showed small cell (oat cell) carcinoma. He received radiotherapy, but died 9 months later. Small cell carcinoma of the oesophagus constitutes 0.8-2.4% of all the oesophageal carcinoma. The tumour is an aggressive one with a poor prognosis irrespective of the treatment.

Key words: Small cell carcinoma, oat cell carcinoma, oesophagus.

Squamous cell carcinoma is the most common form of oesophageal cancer, other types are rare. Small cell carcinoma of the oesophagus constitutes 0.8-2.4% of all oesophageal cancers. Both clinically and pathologically, the latter is a highly malignant neuro-endocrine tumour and resembles its counterpart in the lung with an early dissemination and a dismal prognosis1. One such case along with review of the literature is reported here.

CASE REPORT:

(Mr) R, a 45-year-old resident of Coimbatore presented with dysphagia for solids and liquids, anorexia and progressive weight loss. He was a chronic smoker and had been taking 50 g of country liquor per day for over 10 years.

Examination — He was emaciated and pale. Systemic examination was non-contributory.

Investigations — Chest x-ray was normal. Oesophagoscopy showed a circumferential ulceroproliferative growth measuring between 25 and 30 cm. The distal oesophagus and gastric mucosa were normal. The biopsy specimen comprised diffuse infiltrating sheets of small tumour cells beneath the mucosa. High power magnification showed nests of tumour cells with dense hyperchromatic nuclei, scant cytoplasm with indistinct cellular borders suggestive of small cell (oat cell) carcinoma.

Treatment — Patient received radiotherapy, but died 9 months later.

DISCUSSION

Primary undifferentiated small cell carcinoma is a rare histological type of oesophageal carcinoma. McKeown2 first described two autopsy cases of small cell carcinoma in 1952. The tumour has also been referred to as ACTH-producing tumour, anaplastic carcinoma, amine precursor and decarboxylation tumour or undifferentiated small cell carcinoma.

Small cell carcinoma is common in middle aged and elderly men and like any other cancer of the oesophagus presents with dysphagia. Occasionally, these tumours manifest with symptoms attributable to ectopic hormone secretion (demonstrable by immunohistochemistry)3. The tumours are large, exophytic or infiltrative masses situated in the lower or middle third of the oesophagus. Rarely, multiple tumour foci may be present4.

Small cell carcinoma needs to be distinguished from a primary oat cell carcinoma of the lung, poorly differentiated squamous cell carcinoma, basaloid squamous carcinoma and malignant lymphoma which can metastasise to the lung. The diagnosis can be confirmed by immunohistochemical detection of positivity for protein gene product (PGP) 9.5, chromogranin, synaptophysin and Leu-7, or ultrastructural demonstration of neurosecretory granules. In a significant proportion of cases, it is combined with an in situ or invasive squamous cell carcinoma and/or adenocarcinoma reflecting multidirectional differentiation within the tumour4.

Small cell carcinomas of the oesophagus is an aggressive tumour with a poor prognosis independent of the type of treatment; this is related to an early and widespread metastasis. Survival at end of 6 months is less than 10%5,6.

Ideally the treatment regimen is in line with management of small cell carcinoma of the lung. In recent reports, the effect of a regimen using cisplatin (CDDP) seems to give a better response. Pre-operative therapy had a better prognosis than those with postoperative therapy. Surgical
resection after obtaining a complete reduction of the tumour by chemotherapy can achieve longer survival in absence of metastasis. However, cure is often unlikely because of the high possibility of occult metastasis at the time of diagnosis via aggressive lymphatic and blood vessel permeation, akin to the oat cell carcinoma of the lung.

REFERENCES


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DISCUSSION

The larvae of the variety of Chrysomyia bezziana were responsible for causing ophthalmomyiasis in these case reports. Different species of flies have been identified in different reports. Oestrus ovis larvae have been identified in reports from Belgium and Oman. Dermaobia hominis was identified from patients in French Guiana.

Treatment consists of surgical removal of maggots. Ethyl ether (10%) in vegetable oil, liquefied petroleum or petrolatum applied to the opening of the wound before surgical removal may be useful in slightly anaesthetising or asphyxiating the maggots.

REFERENCES