Squamous carcinoma in situ of the oesophagus in a patient with achalasia

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There is a strong aetiological association between achalasia and squamous carcinoma of the oesophagus, particularly of the middle third. Until now all reported cases have been of advanced tumours, 80% of which have been found unsuitable for resection. We report the first case of squamous carcinoma in situ in a patient with achalasia. It is reasonable to suppose that all tumours go through this "early" stage and that prompt detection may lead to higher resection rates and improved survival.

Case report

In 1981 a 42 year old caucasian man presented to another hospital with a 12 year history of excessive belching, vomiting at night, and epigastric and retrosternal pain. Barium swallow showed gross dilatation of the oesophagus and a diagnosis of achalasia was made. An abdominal Heller's myotomy was performed in May 1981.

In March 1983 he returned with further epigastric pain and belching. A repeat barium swallow showed that the calibre of the oesophagus had diminished considerably since the previous examination, but there was no evidence of carcinoma. Fibreoptic oesophagoscopy showed several white plaques in the mid oesophagus and biopsy showed squamous carcinoma. A full blood count, biochemical investigations, and ultrasound examination of the liver all gave results within normal limits and the patient was referred to the regional thoracic surgical unit at East Birmingham Hospital for further management.

In August 1983 a subtotal oesophagectomy was performed via a left thoracolaparotomy and left neck incision and reconstruction was accomplished by oesophagogastric anastomosis in the neck. There was no evidence of tumour spread at operation. The patient made a satisfactory postoperative recovery and 12 months later remains well with no evidence of recurrent tumour.

The resected oesophagus was 8 cm in circumference. The mucosal lesion in the middle third was not of the usual ulcerated nature but was plaque like with a roughened surface (fig 1) and measured 5 × 2 cm. Histological sections from multiple sites of this lesion all showed squamous carcinoma in situ (fig 2). Sharply delineated tongues of neoplastic cells extended for a short distance into the underlying connective tissue, but there was no evidence of invasion. The overall thickness of the affected epithelium varied from 150 to 750 μm.

Discussion

Carcinoma of the oesophagus in association with achalasia was first reported by Fagge in 1872 and its incidence has been variably reported as 0.3–20% of patients known to

Fig 1 Subtotal oesophagectomy specimen. The in situ carcinoma is represented by a roughened area of mucosa in the middle third (arrowheads).

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have achalasia,1,2 Survival after treatment for these
tumours is very poor and only one patient has been
reported to have survived five years. This poor survival
reflects the extent of the tumours at the time of presenta-
tion. They develop in a dilated lumen and therefore reach a
considerable size before becoming symptomatic; even
then, as patients with achalasia are tolerant towards their
symptoms, a slight change in them will not immediately
result in referral or investigation. This is the first case to be
reported of squamous carcinoma in situ of the oesophagus
in a patient with achalasia. Although the patient had gas-
trointestinal symptoms, these are very unlikely to have
been caused by the neoplastic area in the oesophagus,
which was found incidentally during endoscopy.
Correa1 has reported a range of preneoplastic changes in
the oesophageal mucosa, including chronic inflammation,
leucoplakia, atrophy, papillomatosis, dysplasia, and car-
cinoma in situ. We may reasonably suppose that many
tumours are preceded by such lesions, and that their detec-
tion might result in the finding of an increased number of
patients suitable for resection, with an improvement in
subsequent survival. Although screening for malignancy in
achalasia is currently recommended it is not performed
routinely, and as no patients are reported to have been
cured after presymptomatic detection of tumours the
recommendation for screening is debatable. This case
emphasizes that tumours can be detected at a preinvasive
stage and that screening for malignancy may be of benefit
to patients with achalasia.

References

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