

# CARCINOSARCOMA OF THE OESOPHAGUS

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Carcinosarcoma of the oesophagus is a rare condition, for there appear to be but 30 cases recorded in the literature.

In 1949 Stout, Humphreys and Rottenberg<sup>1</sup> reviewed 20 reported cases when reporting their own. Six years later King and Koerner<sup>2</sup> added a case and referred to 6 further

cases, published in the interim. Since then Poppens, Nicolas and Szanto's case<sup>3</sup> is the only one listed.<sup>9</sup>

Sarcoma of any type is a rarity in the oesophagus for, in the course of making 12,000 barium-meal examinations in White and non-White patients, this is the first case I have

encountered, while carcinoma of the oesophagus is relatively common in non-Whites in South Africa.

#### CASE REPORT

A Coloured farm labourer aged 45 years, from a fruit district in the Western Cape Province, was referred to the Karl Bremer Hospital, Bellville, early in June 1958 for investigation of difficulty with swallowing and a sensation of obstruction in the oesophagus in the middle of the chest of *one month's duration*. Regurgitation of food was experienced for the same period, during which time the difficulty in swallowing solids became worse and semi-fluid food only could be taken sparingly, with consequent rapid loss of weight. A cough and hoarseness were troublesome.

#### Examination

The patient was emaciated. No anaemia, jaundice or cyanosis was noted. The cardiovascular, genito-urinary and central nervous systems revealed no abnormality.

**Respiratory system.** A laryngo-tracheo-bronchitis was present. X-ray changes were apparent in both lung fields, mainly in the mid-zones and bases, suggestive of a spill-and-aspiration phenomenon with increased broncho-vascular striation, as is commonly seen with obstructive oesophageal lesions. An oval soft-tissue mass in the long axis of the mediastinum was visible posterior to the tracheal bifurcation, with a fluid level in a dilated upper third of the oesophagus on a level with the aortic arch.

#### Barium Meal

There was a high-grade obstruction in the upper third of the oesophagus. The upper edge was at the level of the aortic arch, anterior to D5. An oval mass extended downwards for 9 cm.

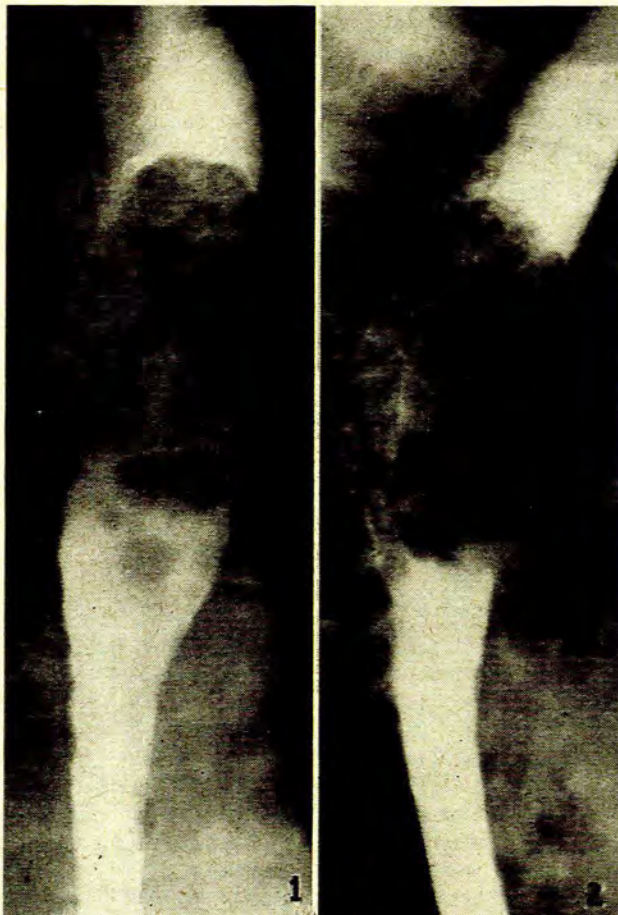


Fig. 1. Barium meal, postero-anterior position.  
Fig. 2. Barium meal, oblique position.

from here and expanded the lumen of the oesophagus to a width of 6 cm. The oesophagus above the mass was dilated to about twice the average normal diameter. A cupola effect at the upper and lower margins of the mass was seen in the erect and Trendelenburg positions. The barium trickled slowly past the mass, showing a coarse net-like thin layer of barium smeared on its surface but no mucosal pattern. (See Figs. 1 and 2.) The rest of the upper alimentary tract was normal. The appearance was unlike a carcinoma and suggested a benign lesion such as a leiomyoma but the fairly rapid development of symptoms favoured sarcomatous change.

**Biopsy** was performed on 7 June 1958 and the following report from the Department of Histo-pathology (Prof. H. W. Weber) was furnished: 'The specimen consists of 4 small pieces of greyish tissue. The histology is that of a malignant anaplastic tumour consisting of spindle-shaped and round cells with many mitoses. I cannot decide with confidence whether it is a sarcoma or a carcinoma but a spindle-celled sarcoma seems to be more probable.'

#### Operation

At operation, on 17 June, there was no sign of malignant spread to the mediastinum. The tumour was resected with the lower two-thirds of the oesophagus. The stomach was mobilized and anastomosed to the upper third of the oesophagus, and a pyloroplasty was carried out.

Post-operatively the patient progressed favourably for 5 days and then developed fever, delirium and pulmonary changes. The anastomosis showed no abnormality or leak on radiological investigation. The patient's condition deteriorated and he died on the 12th post-operative day.

**The pathological report** (20 June) on the specimen stated that there was a large greyish tumour 10 cm. in diameter, which appeared to be a carcinosarcoma consisting of a squamous-cell carcinoma and a spindle-cell sarcoma filling the oesophagus.

#### Comment

Of special interest was the X-ray appearance in this case, which suggested the intramural, extramucosal origin of the tumour by 4 features,<sup>8</sup> viz. (a) the cupola effect with sharply defined margins above and below, (b) distension of the oesophagus with absence of mucosal pattern, (c) smear effect resulting in a web-like pattern as barium passed over the tumour mass, and (d) constancy of shape on respiration unlike a cystic tumour.

The short duration of the symptoms indicated a malignant process but the absence of ulceration and irregularity of contour were quite unlike a carcinoma.

#### DISCUSSION

The illustrations of reported cases reveal that it is impossible to make the diagnosis on the X-ray signs alone, and that myomata<sup>5-7</sup> and other sarcoma types, e.g. melanosarcoma,<sup>4</sup> and leiomyosarcoma may all present as extramucosal lesions,<sup>8</sup> exhibiting sharply defined rounded defects, some with ulceration. With a short clinical history the diagnosis of sarcoma is a reasonable certainty, for it is very unlike carcinoma.

#### OPSOMMING

'n Geval van karsino-sarkoom van die slukderm by 'n nie-Blanke pasiënt word beskryf. Die röntgenologiese kenmerke met 'n barium sluk is 'n skerp begrensde tumor wat die slukderm uitsit met koepel fatsoen bo en onder, 'n smeer-effek en spinnerak patroon waar die barium daaroor loop, sonder enige slymvliespatroon of ulserasie en 'n kort geskiedenis van slukbesware wat spoedig toeneem.

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