CHIRURGIE THORACIQUE / THORACIC SURGERY

CUTANEUOS METASTASIS OF CARCINOMA OF THE OESOPHAGUS TO THE LEFT SHOULDER: A CASE REPORT

M.N. TAMATEY, L.A. SEREBOE, M.M. TETTEY, K. ENTSUA-MENSAH, B. GYAN
National Cardiothoracic Centre, Korle-Bu Teaching Hospital, Accra, Ghana

Correspondence : Dr Martin Tamatey
P. O. Box KB 846, Korle-Bu, Accra, Ghana
E-mail : mtamatey@yahoo.com

Summary
Carcinoma of the oesophagus is a very devastating condition which usually has distant metastasis by the time of diagnosis. However, cutaneous metastasis is highly uncommon, especially the squamous cell carcinoma type. The few cases reported are from adenocarcinomas. We present the case of an advanced squamous cell carcinoma of the oesophagus with cutaneous metastasis to the left shoulder.

Keywords: **cutaneous metastasis, squamous cell carcinoma of the oesophagus**

Résumé
Le carcinome de l'œsophage est une tumeur très dévastatrice qui métastase d'habitude à distance du diagnostic. Cependant, la métastase cutanée est très rare, particulièrement le type carcinome épidermoïde. Peu de cas rapportés sont d'origine adénocarcinomateuse. Nous présentons le cas d'un carcinome épidermoïde évolué de l'œsophage avec une métastase cutanée à l'épaule gauche.

Mots-clés : métastase cutanée, carcinome épidermoïde de l'œsophage

Introduction

Carcinoma of the oesophagus is an aggressive condition with a very high morbidity and mortality, increasing incidence and a poor prognosis.[1,2,3,4] The most consistent risk factors identified in most studies are alcohol consumption, smoking, environmental and dietary factors, increasing age (>60 years), and the male gender (3:1).[1,2,3,4,5,6] Metastatic patterns are by direct, lymphatic, and haematogenous spread. Cutaneous metastasis of carcinoma of the oesophagus is not common.[7,8,9,10] We hereby present a case of carcinoma of the oesophagus who after a transthoracic oesophagectomy and oesophagogastrostomy, presented one year later with cutaneous metastasis to the left shoulder.

Case Report

This 60-year old man was seen with a 6-month history of progressive dysphagia to solids and semi-solids. He could take only liquids. He smoked two packs of cigarettes daily for 30 years and drank about 150ml of strong spirits daily for the same period. He was a seaman (postman). He had lost weight, and was mildly dehydrated. There was no peripheral lymphadenopathy. There was a hepatomegaly of 10cm. The barium swallow showed an irregular outline, a filling defect with shouldering in the distal oesophagus. The oesophagoscopy found an impassable ulcerated tumour at 35 cm. The histology came out as invasive squamous cell carcinoma. The abdominal ultrasound did not find any evidence of intra-abdominal metastasis. He was prepared for surgery. He had transthoracic oesophagectomy

(Ivor-Lewis). The findings were; distal oesophageal tumour of 4 cm in length, involved tracheo-bronchial lymph nodes and hepatomegaly (with no macroscopic lesions seen). There was no infiltration of nearby structures (stage T3N1M0, IIIB). He was discharged home on the 13th post operative day, on normal diet. The histology of the resected specimen came out as invasive well differentiated squamous cell carcinoma with full thickness involvement of the wall and regional lymph node involvement (9 out of the 15 resected).

He was put on a 3-monthly follow-up at the OPD. One year later he presented with a 2 cm ulcerated nodule on the left shoulder. The ulcer had raised everted edges, necrotic floor and a nodular and hard base. There was no bony nor pulmonary involvement. An incision biopsy done came out as metastatic squamous cell carcinoma. The stage was now T3N1M1, IV. He was referred to the oncologist where he had sessions of cisplatin-based chemoradiation to the metastatic site but there was no response. The wound did not heal. It gradually increased in size and became a huge ulcer. He had daily wound dressings until (together with the general debilitation) he passed away 6 months later (that is 1½ years after the oesophagectomy).

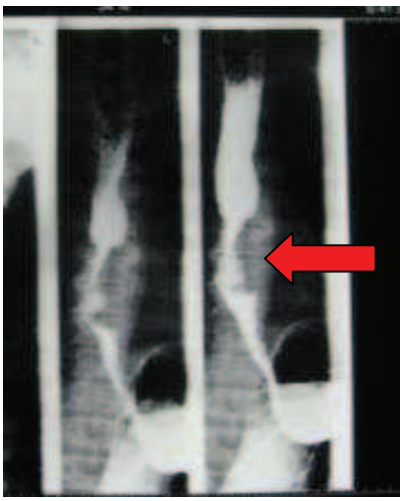

Figure 1. Barium swallow showing irregular outline

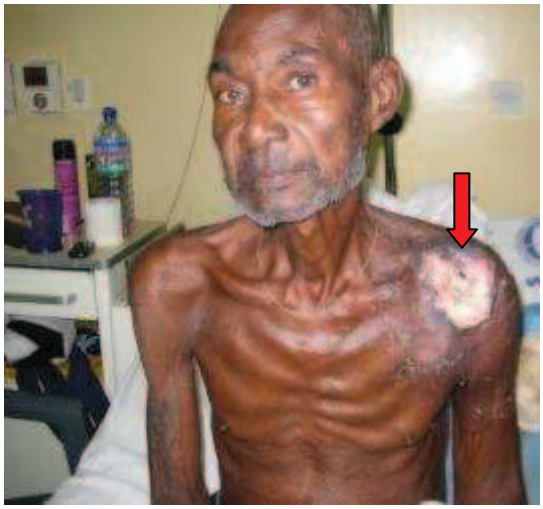

Figure 2. Ulcer (arrow) with raised and everted edges filling defect and shouldering (arrow)

Discussion

In most cases, by the time of diagnosis, carcinoma of the oesophagus is far advanced.[1,2,3,4] This is due to the rich plexus of lymphatics forming a network within the oesophageal wall favouring spread far beyond the macroscopic margins. Another factor favouring early spread is the lack of serosa covering the oesophagus, except for the abdominal portion.[3] The established forms of metastasis are direct spread, lymphatic, and haematogenous spread. The direct spread involves tumour growth through the oesophageal wall to invade surrounding structures like the aorta, the spine, the pleura, the lung, the trachea and/or bronchi, the pericardium and the diaphragm. The lymphatic spread usually involves the deep cervical, paraoesophageal, tracheo-bronchial, left gastric and celiac lymph nodes. Haematogenous spread goes to the liver, lung, bones or the brain.

Our patient had tracheo-bronchial lymph node involvement. Since the thoracic duct joins the venous system at the junction of the left internal jugular and subclavian veins, the nearby left supraclavicular lymph nodes may become involved (called Virchow's node or Troisier's sign). Our patient did not have Virchow's nodes. Neither was there any evidence of bony nor pulmonary metastasis on the chest x-ray. His metastasis was to the soft tissue (skin and subcutaneous tissue) over the antero-superior aspect of the left shoulder. The shoulder joint was not involved.

Cutaneous metastasis usually occurs haematogenously or via the lymphatics.[7] Few cases have been reported, with a slight preponderance of adenocarcinomas.[7,8,9,10] Our patient had a squamous cell carcinoma, thereby

adding himself to the small group of patients with oesophageal squamous cell carcinoma with cutaneous metastasis. In some cases the cutaneous lesions may also actually herald the diagnosis of the primary malignancy.[8,9,10,11] Our patient's metastasis did not respond to the chemoradiation. He passed away 6 months later.

Conclusion

Carcinoma of the oesophagus rarely metastasizes to the skin. If it does it is usually an adenocarcinoma. Few cases of squamous cell carcinomas are also now being encounted.

References

1. Thomas W. Shields. *General Thoracic Surgery.* 2005 ; 150 : 2265 – 2293
2. Author E. Baeue. *Glenn's Thoracic and Cardiovascular Surgery.* 1996 ; 51 : 879 – 895
3. Badoe E.A., Archampong E.Q., Da Rocha-Afodu J.T. *Principles and practice of Surgery, including Pathology in the Tropics* 2009 ; 24 : 400 – 406
4. Pérez Pereyra J., Frisancho Velarde O. Esophageal cancer: epidemiological, clinical, and pathological characteristics at Hospital Rebagliati (Lima). *Rev Gastroenterol Peru* 2009;29(2):118-23
5. Piero Marco Fisichella**,** Marco G. Patti. Esophageal Cancer. *eMedicine.* Oct 24, 2009
6. Ocama P., Kagimu MM., Odida M., Wabinga H., Opio CK., Colebunders B., van Ierssel S., Colebunders R. Factors associated with carcinoma of the oesophagus at Mulago Hospital,Uganda. *Afr Health Sci* 2008; 8(2):80-4
7. Iwanski GB., Block A., Keller G., Muench J., Claus S., Fiedler W., Bokemeyer C. Esophageal squamous cell carcinoma presenting with extensive skin lesions: a case report. *J Med Case Reports* 2008; 2: 115
8. Adyanthaya R. Multiple cutaneous metastases from esophageal adenocarcinoma. *J Gastrointest Cancer* 2008; 39(1-4):159
9. Stein RH., Spencer JM. Painful cutaneous metastases from esophageal carcinoma. *Cutis* 2002; 70(4):230-2
10. Fereidooni F., Kovacs K., Azizi MR., Nikoo M. Skin metastasis from an occult esophageal adenocarcinoma. *Can J Gastroenterol* 2005 ; 19(11):673-6
11. Gemmel Filip., Roosjen Hielke., Van Der Wijk Peter., Collins James.Subcutaneous Metastasis From an Occult Esophageal Cancer Detected by PET-CT. *Clinical Nuclear Medicine* 2008;12(33): 866-867