

Case reports

A case of eccrine porocarcinoma

M S Walsh BSc FRCS *Department of Surgery,
Whipps Cross Hospital, Leytonstone*

Keywords: eccrine porocarcinoma; sweat gland tumour; amputation

A case of eccrine porocarcinoma in the left popliteal fossa is reported. Initially a metastasis from a breast carcinoma was suspected. Treatment was planned with the presence of infection in mind, which dictated amputation. Follow-up is discussed in the light of previous reports.

Case report

A 63-year-old woman had a lump behind her left knee for 10 years. During the 3 months prior to presentation the lump occasionally bled, rapidly grew and prevented her walking.

On examination the left breast was enlarged with no associated lymphadenopathy. There was left inguinal lymphadenopathy with flexion deformities at the hip and knee of 20° and 70° respectively. The popliteal fossa contained a 12 cm diameter, purple, ulcerating, fixed tumour. The surrounding skin and muscle were infected with areas of necrosis and sinus formation (Figure 1).

The left breast was calcified on chest X-ray, biopsies reported fat necrosis. Abdominal ultrasound was normal. Left knee X-ray demonstrated no bone involvement by



Figure 1. Left leg following amputation, demonstrating the tumour in the popliteal fossa. Note the infected and necrotic surrounding skin, best seen below the tumour

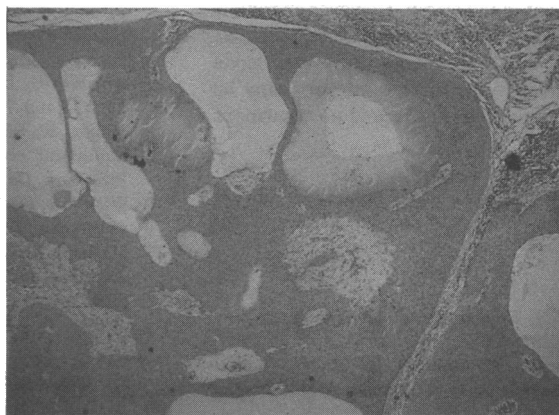


Figure 2. Section of the tumour in this case, demonstrating cystic spaces with small well-differentiated and sparse stroma (H & E x4.3)

the tumour. Following plastic surgical opinion above-knee amputation was performed. Postoperative mobilization was excellent and the lymphadenopathy regressed. Six months follow-up demonstrated no recurrence.

Histology reported a well-differentiated eccrine porocarcinoma invading muscle (Figure 2). Popliteal nodes were reactive.

Discussion

Once a breast secondary was excluded the clinical diagnosis was squamous carcinoma. Treatment was aimed at ensuring tumour and necrotic tissue clearance with patient mobility. Amputation was performed since the limb was infected and useless. Reconstruction was judged to be difficult with no guarantee of success.

Eccrine porocarcinoma, first described in 1963¹ with an estimated incidence of 18/450000 skin biopsies², is rare and arises from the acrosyringium. This report brings the published cases to 81, 44 males and 37 females, mean age 66.8 years (19-90 years), with 44 cases affecting the leg.

Theoretically eccrine porocarcinoma progresses from benign to malignant. This is supported clinically by long histories, mean 8.5 years (6 weeks to 50 years) and recent onset of rapid growth in longstanding cases. Histological reports of dysplasia³⁻⁵ and malignant change in benign variants, including eccrine poroma⁶ and hidroacanthoma simplex⁶ support this theory.

Mean tumour size was 3 cm (0.5-12 cm), presenting as red nodular swellings or brown plaques. Epidermatropism^{1,7,8} was a notable feature, spread also occurred by local invasion, lymphatics and blood. Information regarding metastases was available in 49 cases; they occurred in 27, 20 involving lymph nodes, epidermatropism in 12, lung 5, liver 4, and bone 1.

Recommended treatment is wide local excision with regional lymph node dissection if involved. Radiotherapy and chemotherapy are ineffective^{8,9}. Twenty deaths occurred in the 81 cases, however adequate information was only available in 42.

Histology^{1,2,7,8,10} consists of nests and clusters of cells forming ducts and cystic spaces. Stroma and keratin are sparse. Cells are small, regular and cuboidal when well differentiated (Figure 2), and large and pleomorphic when poorly differentiated. Epidermatropic lesions consist of single Paget-like cells or cell nests similar to the primary. Differential diagnosis includes the common skin malignancies, other eccrine tumours, extramammary Paget's and skin metastases. Histology is characteristic, if doubtful special stains^{2,5,8}, immunocytochemistry^{4,10,11} and electron microscopy^{3,8,11} may help.

Case presented to
Clinical Section,
9 June 1989

This case was similar to previous reports except for the large tumour size and the necessity for amputation as primary treatment. The breast mass was interesting since the breast is phylogenetically an apocrine sweat gland. Although other eccrine tumours are similar to breast carcinomas¹⁰, there are no reports associating breast lesions with porocarcinoma⁸.

In conclusion, eccrine porocarcinoma is a rare, curable malignancy of eccrine sweat gland origin. However on review of the literature metastasis or death occurred in 25% of cases. Close follow-up to detect local recurrence and lymph node metastasis is recommended since further surgery may be curative^{9,11}. In more advanced cases there is no treatment of proven benefit.

Acknowledgments: I thank Mr MC Pietroni of Whipps Cross Hospital for his permission to report this case and for help with the preparation of the manuscript.

References

- 1 Pinkus H, Mehregan AH. Epidermatropic eccrine carcinoma. *Arch Dermatol* 1963;**88**:597-606
- 2 Mehregan AH, Hashimoto K, Rahbari H. Eccrine adenocarcinoma; a clinicopathologic study of 35 cases. *Arch Dermatol* 1983;**119**:104-14
- 3 Mishima Y, Morioka S. Oncogenic differentiation of the intra-epidermal eccrine sweat duct: eccrine poroma, poroepithelioma, porocarcinoma. *Dermatologica* 1969;**138**:238-50

- 4 Puttick L, Ince P, Comaish JS. Three cases of eccrine porocarcinoma. *Br J Dermatol* 1986;**115**:111-16
- 5 Pylyser K, De Wolf-Peters C, Marien K. The histology of eccrine poromas. A study of fourteen cases. *Dermatologica* 1983;**167**:243-9
- 6 Moreno A, Salvatella M, Guix M, Llistosella E, de Moragas JM. Malignant hydroacanthoma simplex. *Dermatologica* 1984;**169**:161-6
- 7 Shaw M, McKee PH, Lowe D, Black MM. Malignant eccrine poroma: a study of twenty-seven cases. *Br J Dermatol* 1982;**107**:675-80
- 8 Turner JJ, Maxwell L, Bursle GA. Eccrine porocarcinoma; a case report with light microscopy and ultrastructure. *Pathology* 1982;**14**:469-75
- 9 Bottles K, Sagebiel W, McNutt N, Jensen B, Deveney K. Malignant eccrine poroma. Case report and review of the literature. *Cancer* 1984;**53**:1579-85
- 10 Wick MR, Goellner JR, Wolfe JT, Su WPD. Adenexal cancers of the skin. *Cancer* 1985;**56**:1147-62
- 11 Matloub HS, Cunningham MW, Yousif NJ, Sanger JR, Romano JA, Choi H. Eccrine porocarcinoma. *Ann Plast Surg* 1988;**20**:351-5

(Accepted 17 November 1989. Correspondence to Mr M S Walsh, Clinical Research Fellow, Surgical Unit, The London Hospital, Whitechapel, London E1 1BB)

Closed loop large bowel obstruction secondary to pancreatitis

J Slavin BSc FRCS F H Smedley MS FRCS
C J Cahill MS FRCS *Westminster Hospital, Page Street Wing, Dean Ryle Street, London SW1P 2AP*

Keywords: large bowel obstruction; pancreatitis

We report a patient with pancreatitis, in whom closed loop colonic obstruction resulted in caecal necrosis. Pancreatitis is an unusual cause of large bowel obstruction. The first case was described in 1927 by Forlini¹. We were unable to find a similar case in the literature.

Case report

A 43-year-old male painter and decorator presented as an emergency with a 2-week history of abdominal pain. Over the previous 48 h this had become more severe and localized to the right iliac fossa. It was associated with absolute constipation and abdominal distension. There was a 3-year history of diabetes controlled with metformin. The patient was a heavy drinker, consuming 10 pints of Guinness a day. On admission he was flushed with a temperature of 37.8°C, a pulse of 96/min and a blood pressure of 130/80 mmHg. The abdomen was distended and tender with guarding in the right iliac fossa. Rectal examination showed an empty rectum. Bowel sounds were absent.

Investigations revealed: haemoglobin 13.2 g/dl, whole blood count $15.1 \times 10^9/l$, glucose 15.3 mmol/l and amylase 113 u/l (electrolytes, urea and liver function tests were within the normal range). Plain abdominal X-rays (Figure 1) showed a distended caecum in the right iliac fossa. At laparotomy a grossly distended and necrotic caecum was found. There was a large mass arising from the lesser sac and root of the transverse mesocolon, involving the hepatic flexure of the

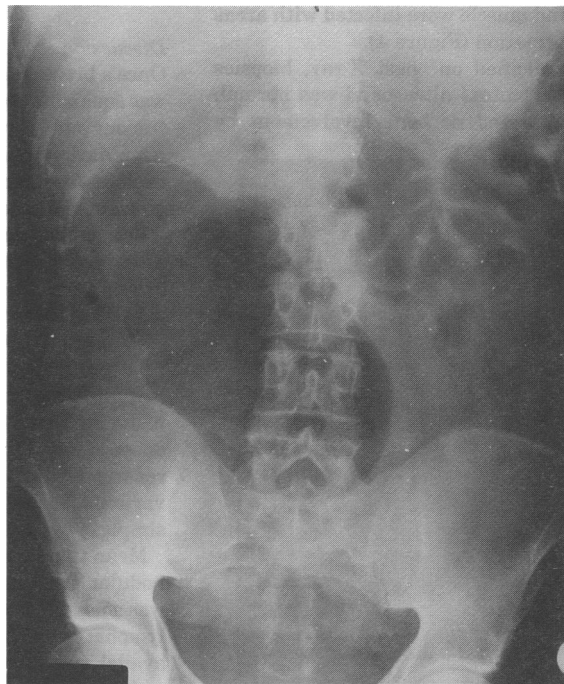


Figure 1. Supine abdominal X-ray demonstrating distended caecum

colon, the gallbladder and the duodenum. The mass was mobilized revealing free pus in an abscess cavity within the lesser sac. The abscess was drained and a right hemicolectomy was performed. The patient made a good postoperative recovery, apart from a minor chest infection which responded to antibiotics and physiotherapy. Histology revealed areas of fat necrosis and calcification consistent with pancreatitis. An ultrasound performed 2 weeks postoperatively showed no evidence of gallstones.

Discussion

Large bowel obstruction caused by pancreatitis has been reported before; obstruction is usually incomplete^{2,3}.

Case presented to
Clinical Section,
8 December 1989

0141-0768/90/
080530-02/\$02.00/0
© 1990
The Royal
Society of
Medicine