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Case Report

Liposarcoma of the colon

R W Parks, F J Mullan, H M H Kamel, Maureen Y Walsh, S T D McKelvey

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Lipomas are frequently encountered in the gastrointestinal tract but liposarcomas in this location are extremely rare. We present the first reported case of primary colonic liposarcoma.

CASE REPORT: A 54 year old female presented with lethargy, abdominal discomfort, diarrhoea, and loss of 7 kg weight. She was clinically anaemic. A firm, irregular 6 cm mass was palpable in the right upper quadrant of the abdomen, and a 6.5 cm mass in the left breast.

Haemoglobin was 7.3 g/dl with microcytic hypochromic indices. Faecal occult blood tests were positive. Barium enema revealed a polypoid tumour in the colon just proximal to the hepatic flexure (Fig 1). Fine needle aspiration cytology confirmed the presence of a carcinoma in the left breast. Right hemicolectomy and left mastectomy operations were performed. There was no clinical, operative or radiological evidence of primary tumour at any other site.

Pathological examination revealed a 6 x 4 x 5 cm polypoid tumour projecting into the colonic lumen (Fig 2). It was largely covered by mucosa with only focal areas of surface ulceration. The cut surface showed multi-lobulated well circumscribed greyish yellow polypoid tumour of firm consistency with no gross evidence of haemorrhage or necrosis. Histological section showed the classical features of the pleomorphic variant of liposarcoma, including univacuolar and multivacuolar lipoblasts with bizarre forms, multinucleated giant cells and numerous mitotic figures (Fig 3). Immunohistochemical markers for epithelial, smooth muscle and neural antigens were all negative. Oil red fat stain was strongly positive. Electronmicroscopy confirmed the lipoblastic and lipocystic differentiation of the tumour cells. One enlarged mesocolic lymph node showed metastatic involvement with tumour cells similar to that of the primary colonic neoplasm

The Ulster Hospital, Dundonald, Belfast.

R W Parks, FRCS, Regional Senior House Officer.

F J Mullan, FRCS, Senior Registrar.

S T D McKelvey, MCh, FRCS, Consultant Surgeon.

Department of Pathology, Royal Victoria Hospital, Belfast.

H M H Kamel, MRCPath, Senior Registrar.

Maureen Y Walsh, MRCPath, Consultant Pathologist.

Correspondance to Mr Parks, Daisy Hill Hospital, Newry, BT35 8DR, Northern Ireland.

Mr F J Mullan is now Consultant Surgeon in Coleraine Hospital.

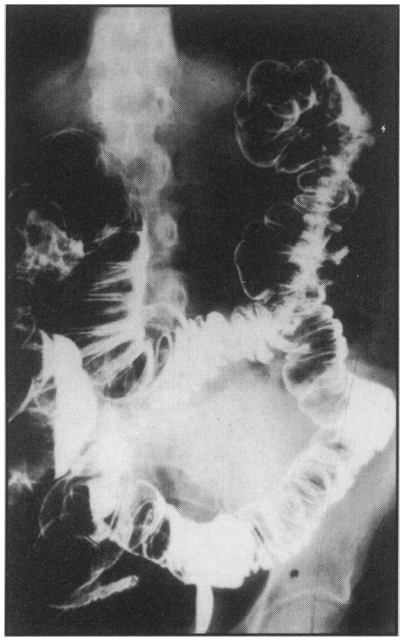

Fig 1. Barium enema showing a polypoid tumour projecting into the colonic lumen just proximal to the hepatic flexure.

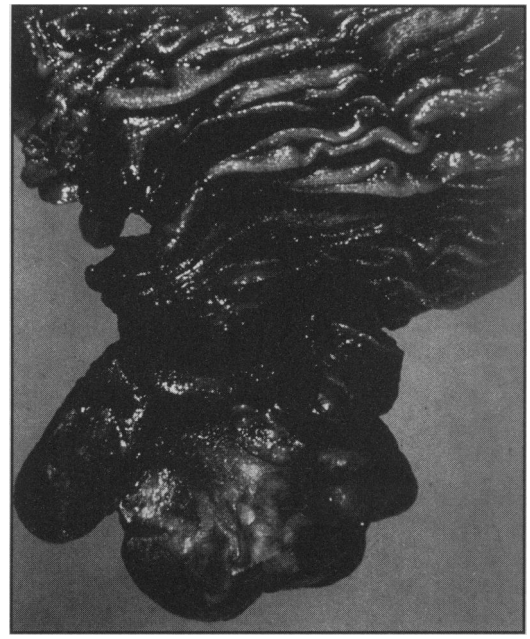

Fig 2. Polypoid tumour removed at right hemicolectomy.

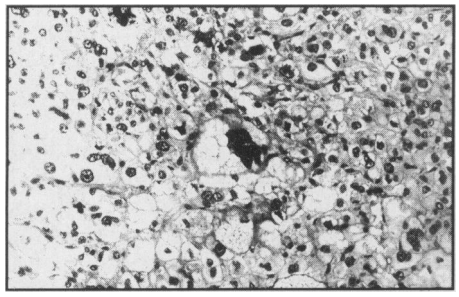

Fig 3. Histological section of the pleomorphic colonic liposarcoma, showing lipoblasts and mitotic figures (haematoxylin and eosin x 175).

The mastectomy specimen contained a 6.5 cm grade II infiltrating ductal carcinoma (type NOS) with extensive ductal carcinoma in situ, (comedo type). Further sampling revealed no areas of poorly differentiated, spindle shaped or metaplastic carcinoma. Three axillary nodes were replaced by tumour cells histologically similar to the breast primary lesion.

DISCUSSION: Liposarcomas most commonly involve the limbs and the retroperitoneum. Primary liposarcomas of the gastrointestinal tract are extremely rare. There have been cases reported involving the oesophagus[1], stomach[2], small intestine[3], and ileo-caecal valve[4], but liposarcoma arising in the large intestine has not been reported. In this case the histological appearances were unequivocally those of a liposarcoma. Physical examination revealed no palpable tumour in the extremities and CT scan showed no other retroperitoneal, intra-abdominal or intrathoracic masses. The involvement of an intra-abdominal regional lymph node suggests metastatic spread from the bowel lesion.

The infiltrating ductal carcinoma of the breast would appear to be an incidental finding, but may reflect an impaired immune status. Hadju studied a large series

of 242 patients with liposarcoma at various sites, and found a 12% incidence of a histologically different but co-existent primary tumour [5].

Preferred treatment for liposarcoma in any location of the body is complete surgical excision. The role of radiation therapy and chemotherapy is not established, but survival may be improved by adjuvant radiotherapy [6]. The prognosis for liposarcoma is dependant on the location, size and histology of the tumour – no patient with pleomorphic variant survived more than five years in a large prognostic study in Scandinavia [7].

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