and focal exocytosis of cells in the epidermis overlying the inflamed dermal papillae observed in this case are well recognised features of delayed type hypersensitivity reaction. Such a delayed type reaction with a cutaneous T cell lymphoma-like morphology has been described as lymphomatoid vascular reaction.[16] Most of the large lymphocytic cells in the infiltrate stained CD30 positive. In the context of neoplasia, CD30 is positive in Reed-Sternberg cells of Hodgkin's disease, the cells of lymphomatoid papulosis and in anaplastic large cell lymphoma (Kil lymphoma). This has been shown to carry an excellent prognosis.[10 17]

The close temporal association of starting cefuroxime and the appearance of the rash, the cutaneous T cell lymphoma-like histology with more features of a lymphomatoid vascular reaction than mycosis fungoides and rapid resolution of rash on cessation of the suspected drug, all favour lymphomatoid hypersensitivity reaction to cefuroxime as the most likely diagnosis. This reaction pattern, not previously described with cephalosporins, appears to be a benign reaction, with there being no relapses for more than a year after cessation of the original offending drug. Our patient remains well and clear of her rash as well as showing no sign of developing any cutaneous or systemic lymphomatous pathology 15 months after her discharge.

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Colonic carcinoma after ureterosigmoidostomy

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Abstract
Urinary carcinogens promote late malignant transformation of the colon after a ureterosigmoidostomy. An unusual case is presented where, despite the early removal of the latter and hence cessation of urine flow, a colonic carcinoma developed at the site of previous anastomosis. The importance of surveillance of all patients who have undergone this procedure to avoid an iatrogenic cancer is emphasised.
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Keywords: rhabdomyosarcoma; ureterosigmoidostomy; colonic carcinoma

Colonic carcinoma arising from the site of a functioning ureterosigmoidostomy anastomosis is a recognised late complication. If the anastomosis is subsequently taken down with no further urine flow into the bowel, the risk of neoplasia is reduced. We describe a rare case where a colonic carcinoma developed coincidentally at the site of a previous ureterosigmoidostomy after a long latent period.

Case history

A 41 year old man presented with rectal bleeding without bowel habit changes. At the age of 3 he underwent cystectomy with ureterosigmoidostomy formation for a rhabdomyosarcoma. Due to recurrent pyelonephritis the ureters were divided near the sigmoid colon and implanted in an ileal conduit seven years later. Two short segments of ureters were left attached to the colon.

Physical examination was normal and a barium enema revealed a lesion in the sigmoid colon. At laparotomy a circumferential cancer was found at the exact site of previous ureteric implantation (fig 1). Histological examination revealed a moderately differentiated adenocarcinoma with two short segments of residual

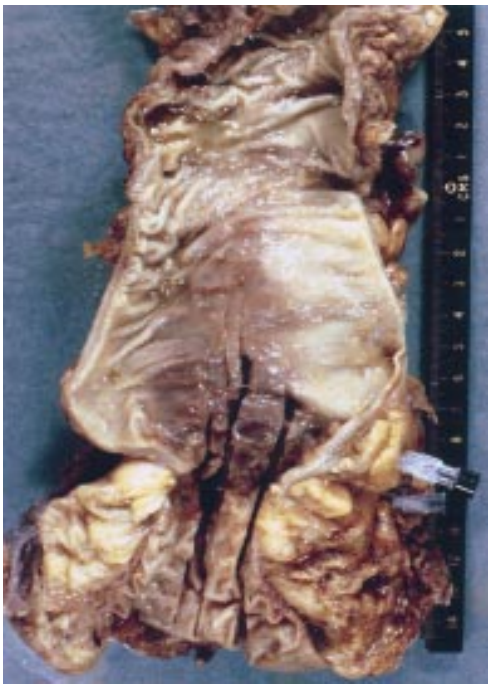

Figure 1 Resected specimen demonstrating sigmoid carcinoma with two short segments of ureters (markers).

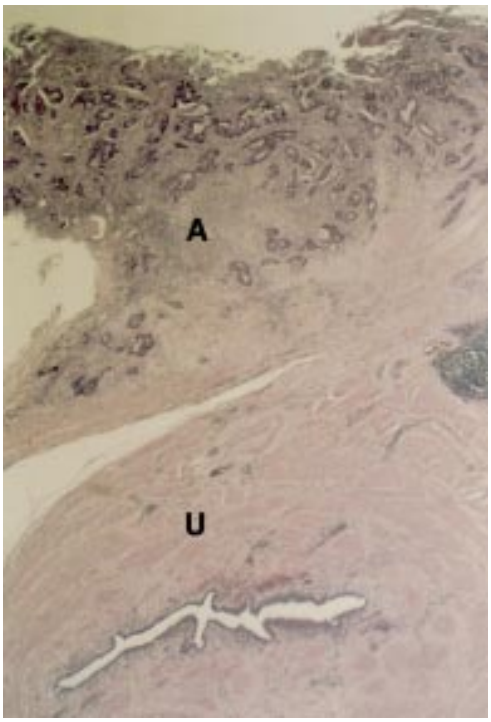

Figure 2 Photomicrograph of resected carcinoma (A = adenocarcinoma; U = ureter; haematoxylin and eosin × 30).

ureter (fig 2). Four of the 14 lymph nodes recovered contained metastatic deposits (Dukes C) and he received adjuvant chemotherapy with 5-fluorouracil and folinic acid.

Discussion

Colonic carcinoma developing at the site of ureteric implant was first described by Hammer in 1929.[1] The incidence is 100 to 550 times that of the general population[2] with an overall lifetime risk of 5%; if the diversion is performed before the age of 25 years, the risk increases to 7000-fold.[3] The latency is between six to 50 years after the procedure[4] with the mean time at 21 years; the median age at diagnosis is 33 years.[5]

Urine in direct contact with colonic epithelium plays a pivotal part in the initiation of carcinogenesis at the suture line.[6] Stewart proposed that dietary nitrates excreted in urine come into the presence of high concentrations of secondary amines when diverted into the colon, with resultant bacterial activation of carcinogenic N-nitroso compounds.[7] Constant faecal stream does not appear to be a prerequisite as carcinomas have been described arising from isolated colonic loops used as a neobladder.[8] Other theories of carcinogenesis including surgical and mechanical trauma, excess concentrations of electrolytes, and chronic irritation resulting in malignant transformation have not been proved.

In the present case the ureterosigmoidostomy had been defunctioned many years previously and the subsequent development of a colonic carcinoma was likely to be a clinical coincidence. It could be argued that there was a causal link between the ureteric implantation and the bowel carcinoma, especially as the latter developed at such young age. However as there was no urine flow during this period this is unlikely.

Lifelong surveillance is recommended for all patients who undergo ureterosigmoidostomy. Starling *et al* suggested that annual colonoscopy with faecal occult blood test should be started soon after ureterosigmoidostomy, with subsequent alternative urinary diversion if recurrent polyps, cancer, or dysplasia were found.[9] A more complex regimen of a faecal occult blood test every three months after two years, an excretory urogram yearly after five years, and sigmoidoscopy or colonoscopy every five years has also been proposed.[2]

Registries of patients are often undertaken in large centres[7] but the long latency to cancer development with subsequent patient movement makes tracking of these patients difficult.[9] Patients and their physicians should therefore be fully informed of the risks associated with this procedure so that appropriate surveillance could be arranged. Hospital specialists should have a high index of suspicion when a patient presents with a history of urinary diversion and hence the possibility of colonic malignancy. Failure to do so would prevent the early detection of an iatrogenic bowel cancer.

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WEB SITE REVIEW

International Herpes Management Forum (www.IHMF.org)

This large site has the most comprehensive collection imaginable of monographs, original papers and pictures on herpesvirus infections. Not just herpes simplex virus and varicella but cytomegalovirus, Epstein-Barr virus, human herpes virus 6, 7, and 8 are all exhaustively covered.

Complete monographs can be downloaded from the *Library* section or alternatively there are shorter management guidelines on such topics as herpesvirus infections in pregnancy and clinical implications of latency. There is also a whole section entitled *Molecular Biology—all you ever wanted to know but were afraid to ask!*

The site's welcome page implies that it will be useful to visitors ranging from specialists to patients but the format is heavily weighted in favour of health care professionals. Most patients would need a good medical dictionary at hand and the format is bland and rather uninviting for the casual visitor.

For specialists there is a journal club and there are regularly updated details of international virology meetings on another of the main sections. Also featured is a world map with links to herpesvirus organisations across the globe.

An Acrobat reader and PowerPoint are required to utilise large parts of the site but anyone with these facilities can download entire lecture presentations of high quality.

The site is sponsored by a pharmaceutical company but is not heavily promotional. Highly recommended.

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