Benign polypi at the site of uretero-rectal anastomosis

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Summary

A case of benign polypi at the site of uretero-rectal anastomosis is herein reported. Nine other similar cases are reviewed. Possible aetiology and diagnosis are discussed.

Introduction

Even though ileal conduit, which was popularized by Bricker (1950), has largely replaced uretero-sigmoidostomy, the latter is still used in some centres as a procedure of choice for urinary diversion.

Development of neoplasia at the site of anastomosis is rare. Hammer (1929) described the first case of carcinoma in a 60-year-old man 10 years after uretero-sigmoidostomy. Very few cases of benign polypi have been reported. There is no report of two polyps developing at the site of uretero-colonic anastomosis at the same time. Such a case is now reported.

Case report

A 22-year-old woman complaining of rectal bleeding was admitted to St Vincent's Hospital, Dublin. The patient had undergone uretero-rectal anastomosis for bladder exstrophy at 6 years of age. Her renal status on admission was good with a GFR by EDTA of 120 ml/min. Rectal examination was negative except for blood on the examining finger.

Sigmoidoscopy showed two polypoidal masses at the site of uretero-rectal anastomosis. The ureteric openings were identified by injecting methylene blue. Both polypoidal growths were removed and the pedicles were secured with catgut sutures. The patient developed mild pain in the right loin on the first postoperative day. The pain became colicky in the next 2 days and the temperature rose to 101°F. On examination, the right renal angle was tender. An intravenous pyelogram showed an obstructed right lower ureter. The next day a catgut suture obstructing the right ureteric orifice was removed following which the pain and temperature subsided. Follow-up intravenous pyelogram was normal and a barium enema showed a normal large bowel. Histologically the masses were found to be benign adenomatous polypi (Fig. 1).

Discussion

Only nine cases of benign tumours arising at the site of uretero-colonic anastomosis have previously been reported. These are detailed in Table 1. This patient is the tenth. The average age of the patients was 31.8 years. There are varied opinions about aetiological factors which are more speculative than definitive, but one common factor in all the cases is uretero-colonic anastomosis. Aldis (1961) suggested that the mechanical trauma to the pseudopolyp

TABLE 1. Benign adenomatous polyp complicating uretero-colonic anastomosis

Reference	Age (Sex) (years)	Original condition	Latency (years)
Ellis (1962)	55 (M)	Abacterial cystitis	14
Gillman (1964)	82 (M)	Vesical papilloma	7
Markowitz and Koontz (1966)	16 (F)	Exstrophy	14
Markowitz and Koontz (1966)	16 (M)	Exstrophy	15
Markowitz and Koontz (1966)	19 (M)	Exstrophy	18
Ferguson (1966)	30 (M)	Exstrophy	26
Kille and Glick (1967)	19 (M)	Epispadias	15
MacGregor (1968)	62 (M)	Transitional cell carcinoma of bladder	5
Haney and McGarity (1971)	44 (F)	Exstrophy	38
Present case	22 (F)	Exstrophy	16

FIG. 1. (a) Histological section of the polyp showing the pedicle. (b) Same histological picture showing only the glandular structure of the polyp.

formed by projecting ureters was an important factor. Sammo and Traverso (1967) studied histological and histochemical changes in bowel mucosa of patients and noted a period of proliferation affecting the glandular epithelium characterized by marked cellular hyperplasia and over-production of mucus. It may be the urine bathing the colon which potentiates the development of neoplasia several years later, but it is not clear why some patients develop benign lesions and others carcinoma. Colonic polyps are not uncommon, but the fortuitous occurrence of two polypi precisely at the ureteric orifice is improbable. The commonest presenting symptoms appear to be rectal bleeding and ureteral obstruction. In the present case, rectal bleeding was the presenting feature. The subsequent ureteric obstruction was iatrogenic.

The incidence of neoplasia at the anastomotic site appears to be confined to the colon rather than the ileum. The possibility of neoplasia should be kept in mind when this type of operation is performed, as with improved techniques and better management these patients have much longer life expectancy.

Long-term follow-up is necessary in uretero-colonic anastomosis for urological reasons, but it is also necessary to bear neoplasia in mind when examining the anastomotic site.

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