Case Report

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Solitary Fibroepithelial Polyp of the Renal Pelvis

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Key Words

Benign solitary fibroepithelial polyp
Renal pelvis

Abstract

An unusual case of benign fibroepithelial polyp of the renal pelvis in a patient past middle age is presented. Peroperative frozen section microscopy should be done to prevent nephroureterectomy. The therapy was local excision. The postoperative course was uneventful.

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The fibroepithelial polyp has previously been described as a ureteral lesion in younger persons [1, 2]. It is rare that this benign condition involves the renal pelvis as a solitary lesion, and it is especially remarkable to see it in a patient past middle age.

Less than 20% of the tumors of the renal pelvis are benign. Williams and Niederhaeusern [3] have classified them as follows:

1

Tumors of epithelial origin (papillomas) which are potentially malignant

Tumors of mesodermal origin Fibrous polyps Angiomatous polyps Hemangiomas or lymphangiomas Leiomyomas Neurofibromas

Miscellaneous types; endometriosis, amyloidosis granulomas

As conservative surgery rather than nephroureterectomy should be performed in this benign condition [4, 5], we have found it relevant to mention the following case.

A urinalysis performed by the family physician revealed negative urine cultivation. There was no gross hematuria. 11 years previously a transvesical prostatectomy had been performed.

Microscopy showed cancer of the prostatic gland and he has been treated with diethylstilbestrol ever since. He has also been treated several times for stenosis of the urethra and has received treatment for hypertension for the last 20 years.

The laboratory findings were as follows: BP 160/90 mm Hg; Hb 6.5 mmol/l; leukocyte count $12.0 \times 10^9/l$; serum creatinine 340; serum electrolyte normal; acid phosphatase 5.5. Urine examination showed 8–10 erythrocytes, 1–2 leukocytes, no cylinders and a few bacteria.

An excretory urogram showed no excretory function of the left kidney and a normal pyelogram on the right side. Cystoscopy showed normal function of both ureteral ostia. A retrograde ureterogram revealed a 2×6 cm large mobile filling defect in the lower part of the renal pelvis (fig. 1). At operation a pyelotomy was done and a $1 \times 2 \times 6.5$ cm large light-red smooth polyp was found attached to the lower calyx wall. Local excision was accomplished (fig. 2). Frozen section microscopy showed a fibroepithelial polyp without malignancy. The postoperative course was uneventful.

Final microscopic examination revealed a fibrous stroma with varying amounts of cells and only a few mitoses present. The surface was covered with normal urothelium.

Case Report

A 77-year-old man was admitted to the hospital for urologic examination because of intermittent left flank pain, chills and fever attacks up to 39.5 °C.

Conclusion

It is well known that patients with ureteral polyps present with flank pain due to obstruction of the urine flow [1, 4, 5]. Intermittent flank pain can be seen in

Solitary Fibroepithelial Polyp of the Renal Pelvis

457

Fig. 1. Retrograde ureterogram showing fibroepithelial polyp in the left renal pelvis. Fig. 2.

Fibroepithelial polyp from renal pelvis.

patients with polyps of the renal pelvis due to partial obstruction. Hematuria can be seen in both conditions [4–6]. The pathogenesis of these benign polyps is still unknown [4, 5]. Hormonal influence, infection, obstruction and congenital origin have been proposed [2, 6]. Allergy has also been mentioned as a possibility [4]. Benign polyps are mostly present in the upper ureter and they usually occur in patients between the ages of 5 and 40 years [1, 4, 6]. The preoperative diagnosis can be difficult [5]. Radiologically they show a sharp smooth filling defect. At operation no infiltration into the surrounding tissue is seen [4]. Peroperative diagnosis is important and consequently frozen sections should be taken at least in dubious cases [5]. In the past many unnecessary nephroureterectomies were performed as a treatment for ureteral polyps

[7], perhaps because these cases were mistaken for papillary carcinomas due to a lack of knowledge of the condition [5]. The treatment is simple local excision [3]. Recurrence has never been reported [5].

References

Compere, D.E.; Begley, G.F.; Isaacks, H.E.; Frazier, T.H.; Dryden, D.B.: Ureteral polyps. J. Urol. 79: 209–214 (1958).

Evans, A.T.; Stevens, R.K.: Fibroepithelial polyps of ureter and renal pelvis, a case report. J. Urol. 86: 313–335 (1961).

Williams, D.L.; Niederhaeuser, W.V.: Les polypes de l'uretère. J. Urol. Néphrol. 69: 145–154 (1963).

Jansen, T.T.H.; Van De Weyer, F.P.H.; Devries, H.R.: Angio-matous ureteral polyp. Urology 30: 426–427 (1982).

Olsen, S.: Tumors of the kidney and urinary tract, p. 146 (Munksgaard, Copenhagen 1984).

Debruyne, F.M.J.; Moonen, W.A.; Daenekindt, A.A.; Delaere, K.P.M.: Fibroepithelial polyp of ureter. Urology 16: 355–359 (1980).

Melicow, M.M.; Findlay, H.V.: Primary benign tumors of the ureter. Surgery Gynec. Obstet. 54: 680–689 (1932).