An Unusual Case of Haematuria

Mr Chandran Louis PA-R, FHEA, Senior Lecturer at St Georges University of London, Vice President of the Faculty of Physician Associates

Mr Dennoshan Sri FRCS Consultant Urologist, St Georges Hospital NHS Foundation trust

Background

Benign primary ureteral tumours are rare and benign ureteric fibroepithelial polyps (UFP) are the most common type of benign ureteral tumour (accounting for 2-6% of all ureteral neoplasms)[1]

These polyps contain stroma that derived from the mesoderm and are covered by a layer of normal transitional epithelial cells. Aeitology of these polyps remain unknown but it is suggested that it could be linked to congenital disorders in mesodermal development or hormone disorders and trauma.[2]

Commonly these ureteric polyps have a male predominance and occur in the second to fourth decades. The proximal ureter and the renal pelvis are the typical sites for UFPs[3]

The clinical symptoms that are generally associated with UFPs are haematuria and flank pain due to obstruction. Radiological appearances generally mimic a upper tract urothelial carcinoma (UTUC) with an associated filling defect, therefore definitive diagnosis can only be established by histopathological analysis[1,3] .

Case

A 22 year old man is referred for an urgent outpatient consult due to painless haematuria and associated left loin pain.

He had no lower urinary tract symptoms of dysuria, frequency or urgency. He did not have any associated risk factors such as new sexual partners, smoking or recreational drugs. He is otherwise fit and will.

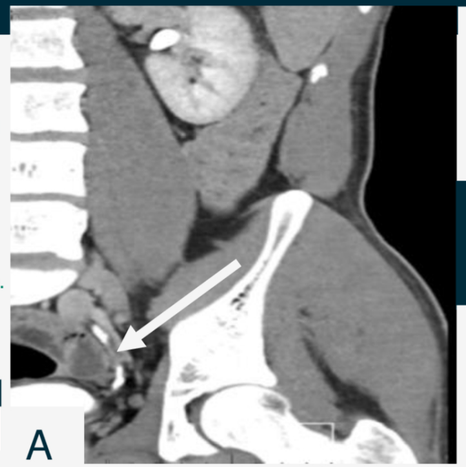
He underwent a cystoscopy which revealed no gross lesions within the bladder but blood coming from the left ureteric orifice. The patient underwent further investigations with a CT triple phase which revealed a filing defect in the left distal ureter which could either represent a clot or lesion (see fig A). His labs during this time were normal.

Due to the finding he underwent a left retrograde and ureterorenoscopy (URS) and biopsy of ureteric polyp. The histology revealed inflammatory changes only.

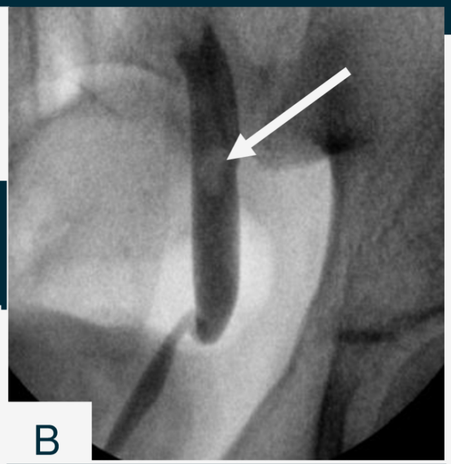
His definitive management came in the form of a laparoscopic robotic assisted excision of the ureteric lesion with primary closure. He had a temporising ureteric stent which was removed four weeks after the procedure. Final histology revealed a benign fibroepithelial polyp.

He has been followed up for the past three years with ultrasound imaging and has remained well with no symptoms of recurrence.

Investigations (CT findings, Retrograde ureteroscopy (URS) images)



A



B

A. CT- There is a filling defect in the left distal ureter which commences to 2-3 cm from the left ureteric orifice and extends superiorly to the level of S1. There is questionable enhancement within the lesion.

B. URS- Pedunculated solid tumour arising from mid ureter with flat base

Discussion

A fibroepithelial polyp of the ureter is a rare cause of haematuria and radiological appearances make it difficult to distinguish this from a UTUC.

Across the literature 200 cases have been reported with young adults ranging from 20 to 40 being the most predominant age. Typical length of UFP ranges from 1-5cm and are described in the literature as cylindrical, smooth in contour and elongated.

Previous management of UFP was in the form of nephroureterectomy (mainly due to unclear diagnosis), however now the main stay of treatment is ureteroscopy resection/fulguration or laparoscopic robotic excision with primary closure as seen in our case[4].

There have been no cited case reports of malignant transformation from UFPs[1]

Learning points

- Ureteric fibroepithelial polyps (UFP) are rare benign mesenchymal tumours involving the ureter and renal pelvis
- Initial investigations should include cystoscopy and CT urography.
- It remains a diagnosis of exclusion with the main differential being UTUC, therefore every effort should be taken to perform an endoscopic histological analysis.

References

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