

## Fibroepithelial polyp of the urinary bladder. Case report

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Fibroepithelial polyps of the urinary tract are rare benign mucosal lesions which usually occur in young to middle-aged adults. Fibroepithelial polyps of the bladder may occasionally exhibit a striking epithelial pseudocarcinomatous proliferation. We report a case of a polypoid tumor with epithelial proliferation in the urinary bladder in a young man treated in the Department of General, Oncological and Functional Urology, Medical University of Warsaw. The tumor was resected and found to be a fibroepithelial polyp.

### Polip włóknisto-nabłonkowy pęcherza moczowego. Opis przypadku

Polip włóknisto-naczyniowy dróg moczowych jest łagodną zmianą, która rzadko występuje u osób młodych i w średnim wieku. Zdarza się, że polipy zawierają komponent nabłonkowy, który dominuje nad włóknistym zrębem, sprawiając wrażenie zmiany pseudonowotworowej. Przedstawiamy przypadek polipowatego guza z obfitą proliferacją nabłonkową u młodego mężczyzny leczonego na oddziale Kliniki Urologii Szpitala Dzieciątka Jezus w Warszawie. Guz wycięto i rozpoznano polipa włóknisto-nabłonkowego.

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**Słowa kluczowe:** polip włóknisto-nabłonkowy, pęcherz moczowy, resekcja przezcewkowa

**Key words:** fibroepithelial polyp, urinary bladder, transurethral resection

### Introduction

Fibroepithelial polyps of the urinary tract are rare benign mucosal lesions which usually occur in young to middle-aged adults, but can also occur in children and the elderly, with a higher frequency in males. The etiology of most fibroepithelial polyps is obscure, but many are considered to be either of congenital or inflammatory origin and are often associated with calculi. Polyps occur most commonly in the renal pelvis, the proximal ureter, near the verumontanum, the ureteropelvic junction or the bladder [1, 2].

### Case report

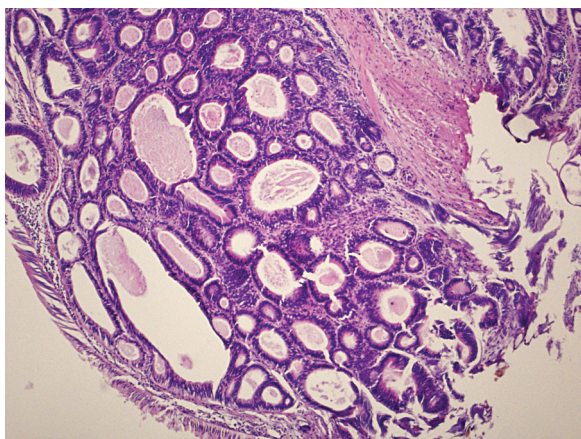
A 29-year-old male patient presented in the Department of General, Oncological and Functional Urology, Medi-

cal University of Warsaw complaining of painless macroscopic hematuria of four-month duration. The patient did not report previous urinary tract disorders and/or use of drugs. A CT-scan and cystoscopy identified the presence of an exophytic papillary “non-typical” tumor on the anterior wall of the bladder, of 7 × 6 mm dimensions. The lesion was removed transurethrally with broad margins. The base was coagulated. There were no other lesions in the bladder.

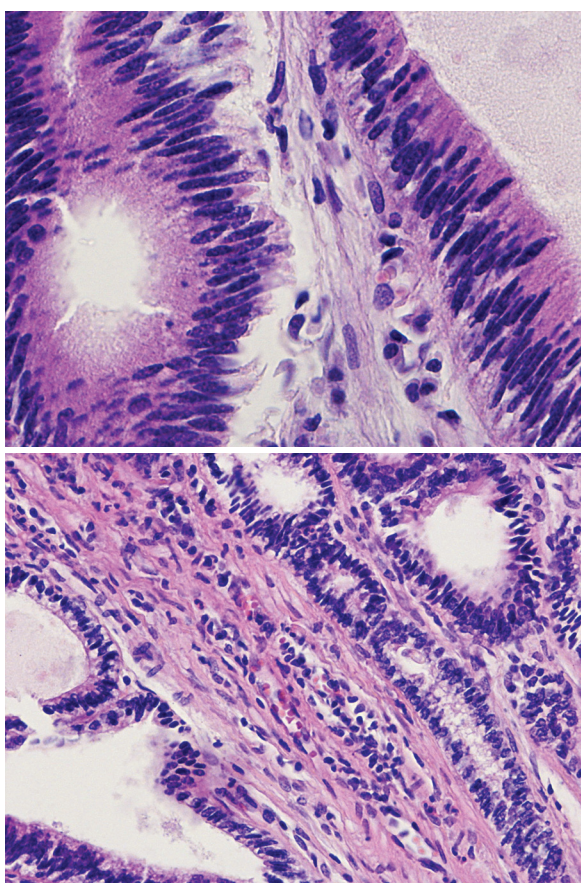
Microscopically, the polypoid lesion consisted of papillary foldings with a dense fibrous core lined by columnar epithelium. The polyp exhibited a striking epithelial proliferation with florid glands in the stalk. The densely distributed glands seemed to resemble a neoplastic infiltration lesion. Figure 1, but the cytological picture of the epithelial

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**Figure 1** shows the striking nature of the proliferation (a low power-view)



**Figure 2 and 3** shows bland cytology and an intervening stroma typical of fibroepithelial polyp (a higher power view)

cells of the glands did not reveal either atypia or mitoses Figure 1. The lesion lacked prominent edema and inflammation Figures 2, 3. The additionally collected specimen of the base, including the muscular wall, revealed no changes. The postoperative period was uneventful. After three months the patient had a follow-up cystoscopy. Repeated TURT (Transurethral resection of tumor) showed a cicatri-

tial alteration with a surface crust. Microscopically, scant inflammatory infiltration with fibrosis in the subepithelial layer was found. A half-year follow-up was uneventful and ultrasonography showed a normal bladder.

## Discussion

Tumor-like lesions of the urinary bladder are diagnostically most challenging for the pathologist and may result in serious errors in patient care if misinterpreted. Histologically, all of the fibroepithelial polyps are lined by normal-appearing urothelium, or columnar epithelium. There are three overall architectural patterns seen within fibroepithelial polyps. The most common pattern consists of a polypoid mass with club-like projections resembling a cloverleaf with florid cystitis cystica et glandularis of the nonintestinal type in the stalk. The second pattern consists of a papillary tumor composed of numerous small, rounded fibrovascular cores containing dense fibrous tissue. The third morphologic pattern consists of a polypoid lesion with secondary, tall, finger-like projections. The rare fibroepithelial polyp of the bladder may occasionally exhibit a striking glandular proliferation and be confused with glandular carcinoma [3]. Our case shows that, depending on the microscopic picture, appropriate attention should be given to the gross characteristics in arriving at the final diagnosis. The lesion appears "strange" on cystoscopy. Histologically, the polyp should be differentiated from adenocarcinoma of the bladder, cystitis cystica or if it is located on the anterior wall of the bladder, from urachal adenocarcinoma. A correct diagnosis allows the choice of the most adequate surgical management. In invasive adenocarcinoma of the bladder significant atypia or mitoses are seen. The commonest (non-intestinal) form of cystitis glandularis is characterized by glands lined with cuboidal to low columnar cells, which are themselves surrounded by a layer of transitional cells, intervening stroma with oedema and inflammation [4]. Urachal adenocarcinoma is characterized by infiltration muscularis propria through mucinous adenocarcinoma [5].

Cases of malignant transformation of a fibroepithelial polyp have not been reported. However, the possibility of a recurrence of the polypoid lesion has been indicated [4, 6]. Ultrasound examination appears to be a good tool to follow up these patients. However, in some cases an MRI should be considered to rule out a bladder recurrence [4, 6].

**Conflict of interest:** none declared

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