A Case of Polypoid Cystitis Mimicking Bladder Tumor in Asymptomatic Patient

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ABSTRACT
We report a 31-year-old male with a polypoid mass that was revealed by abdominal ultrasound during a health checkup and was confirmed by subsequent cystoscopy. The patient underwent transurethral resection. Histological examination of the resected specimen showed polypoid cystitis. Clinical, macroscopic, and radiologic findings for polypoid masses may overlap; thus, histologic evaluation is required.

Key words: Cystitis, Urinary Bladder, Carcinoma, Ultrasonography

Polypoid cystitis is a reversible, exophytic inflammatory lesion of the bladder mucosa and is characterized histologically by normal or mildly hyperplastic urothelium overlying a congested, chronically inflamed and markedly edematous stroma (1).

Polypoid cystitis is recognized frequently in patients with indwelling catheters and is seen mostly on the dome and posterior wall of the bladder which corresponds to the localization of the tip of the catheter. It may be difficult to distinguish it from transitional cell carcinoma macroscopically at cystoscopy because of exophytic nature of the lesion, especially in patients with no history of a catheter (2).

In this case, we present the radiologic and pathologic features of patient with polypoid cystitis who did not have an indwelling catheter and was confused with bladder tumor at initial radiologic and cystoscopic evaluation.

CASE REPORT
A 31-year-old male patient was admitted to hospital for check up. There was no history of urinary catherization, trauma or urogenital disease. Laboratory tests were as follows: serum hemoglobin 13.3 g/dl, white blood cell count 9800/mm\textsuperscript{3}; hematocrit 45 \% (37-52) and platelet count 400,000/mm\textsuperscript{3}. Liver and renal function tests and urine analysis were normal.

The abdominal ultrasound showed a 7 mm polypoid mass projecting into the bladder lumen (Figure 1). During cystoscopy, sessile, papillary lesion was seen on the trigon of bladder. Transurethral resection of the tumor was performed. The pathological diagnosis was polypoid cystitis (Figure 2).

Figure 1. Transabdominal US image was shown a 7 mm solid homogeneous echoic mass protruding into the bladder lumen.
DISCUSSION

The term “polypoid cystitis” was used by Mostofi and by Friedman and Ash for a related process characterized by polypoid mucosal lesions (3,4). It is associated usually with the presence of an indwelling catheter. Ekelund and Johansson have found the histologic changes of polypoid cystitis in 41 of 50 geriatric patients treated with bladder catheterization (5). Most of the lesions (34/50 patients) were on posterior wall which was corresponding to the localization of catheter tip (5).

At cystoscopy, or on microscopic examination, polypoid cystitis may be confused with transitional cell carcinoma (6,7). On gross inspection and microscopic examination, the fronds of polypoid cystitis are typically much broader than those of a papillary carcinoma. In polypoid cystitis, the urothelium may be hyperplastic, but usually it is not as stratified as in a carcinoma; additionally, umbrella cells are more often present. The fibrovascular cores of the papillae of a transitional cell carcinoma typically lack the prominent inflammation that characterizes polypoid cystitis. Large papillae of a transitional cell carcinoma also often give rise to smaller papillae, a feature less commonly seen in polypoid cystitis (8).

Focal masses of the bladder may be neoplastic or may develop secondary to congenital, inflammatory, idiopathic, or infectious sources. Clinical, macroscopic, and radiologic findings for these masses may overlap (9).

All polypoid or papillary lesions in patients with or without a catheter should be harvested for microscopic examination to make a confident differential diagnosis. The clinical features and pathologic findings may reliably help the pathologist to distinguish polypoid cystitis from papillary transitional cell carcinoma.

REFERENCES