

NEPHROGENIC ADENOMA OF THE BLADDER : A CASE REPORT

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SUMMARY : *Nephrogenic adenoma is a rare metaplastic lesion of urothelium that usually is associated with antecedent inflammation or surgical procedures. We report a case of nephrogenic adenoma of the bladder, discovered incidentally during cystoscopic examination. Clinical aspects and typical histopathological features are presented.*

Key Words : *Nephrogenic Adenoma, Urinary Bladder.*

INTRODUCTION

Nephrogenic adenoma is a rare metaplastic condition of urothelium. Although its pathogenesis has not been entirely defined, it is believed to represent an urothelial transformation in response to chronic irritative lesions such as trauma, surgery, calculus disease or inflammation (6, 7, 10). While it can occur throughout the entire urinary tract, it usually appears in the bladder. We present a case of nephrogenic adenoma of bladder together with its clinical and pathological findings.

CASE REPORT

A 57-year-old male patient who was unable to deliver a partially fragmented right lower ureteral stone following 3 sessions of ESWL treatment was controlled with intravenous pyelography. At cystography, a filling defect starting from bladder base extending to left bladder wall was observed and thus cystoscopy was planned. The patient had undergone right ureterolithotomy 8 years before and transurethral prostatectomy 4 years before. He had cystitis symptoms and the urinalysis de-

monstrated microhematuria. On cystoscopy a bulbous oedema of the bladder base and polypoid lesions at both sides starting from the bladder base were observed. Polypoid lesions were resected transurethraly and fulgurated.

Microscopically, surface epithelium was lined by single layer of cuboidal cells occasionally forming papillary configuration. At the lamina propria, glandular elements were found either singly or in combination; mostly in tubular or rarely in cystic form. They were lined by cuboidal cells typically exhibiting little cytological atypia and no mitotic figures were observed. A mild to moderate chronic inflammatory infiltrate was present in the stroma. Histologic findings were consistent with nephrogenic adenoma (Figure 1, 2).

DISCUSSION

Nephrogenic adenoma (also known as adenomatoid tumor, nephrogenic adenositis, nephrogenic metaplasia) is a rare uroepithelial lesion being increasingly reported by various authors recently. It was first described by Davis in 1949 (4). Various re-

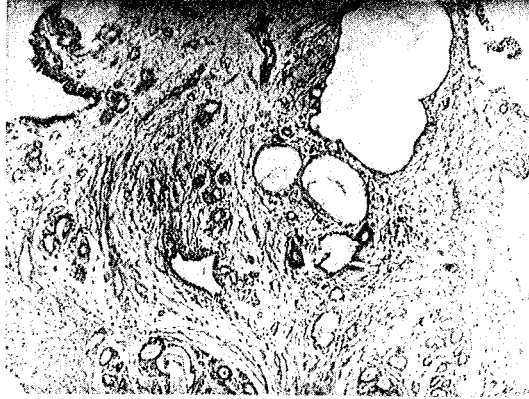


Fig - 1 : Nephrogenic adenoma panoramic view. Cuboidal cells line surface epithelium which occasionally form papillary configuration. Below the mucosa, adenomatous islands sometimes in cystic form, with mild to moderate stromal mononuclear inflammatory infiltration are present (H.E. X 100).

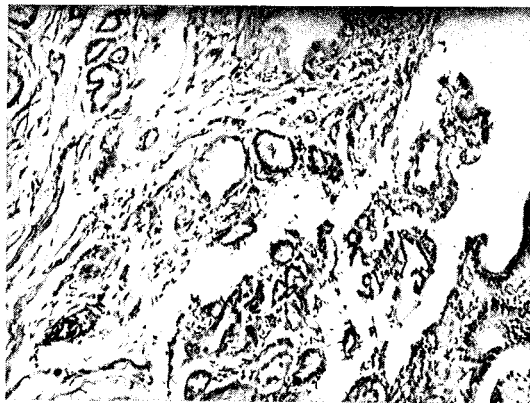


Fig - 2 . Single layer cuboidal or low columnar cells lining the glandular elements and stromal lymphocytic infiltration (H.E. X 200).

ports concerning the pathogenesis have suggested that it is a reactive process secondary to chronic irritative lesions such as trauma, surgery, calculi or inflammation (5, 7, 10). In the literature nephrogenic adenoma presenting after urinary tuberculosis (3) intravesical chemotherapy (8), renal transplantation (1), and intravesical BCG treatment (5) was reported. Lesion usually occurs in the bladder, while sites such as pelvis renalis, ureter (6) and even urethral diverticules (8) were reported. The adenoma was thought to occur following 4 to 8 years after

the mentioned cause (6). In our patient, transurethral prostatectomy was thought to be the etiologic factor. Clinically lower urinary tract irritative symptoms and hematuria in nearly half of the patients are present.

The diagnosis is performed histopathologically. Diffuse growth pattern, glycogen content, mitotic figures and nuclear atypia observed in clear cell adenocarcinomas are important clues for differential diagnosis. The treatment of nephrogenic adenoma is transurethral resection and fulguration.

Although it is considered to be a benign lesion having also a benign behavior pattern, it must be taken into consideration that it is a metaplastic lesion; therefore patients should be carefully followed up with periodic cystoscopic examination (7).

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