

Case Report

Bladder Benign Inverted Papilloma in Young Men: A Case Report

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Abstract

An inverted papilloma of the urinary tract is a rare benign lesion. A 35-year-old male presented gross hematuria. Cystoscopy showed one, papillary tumor at the bladder trigone. Transurethral resection was done, and histological examination has concluded in the diagnosis of inverted papilloma. Following resection, the patient was asymptomatic with no hematuria and no recurrence after a five-year cystoscopy control. We report a case of bladder Inverted papilloma and we aim to remind the clinical, histological, and therapeutic features of this rare tumor.

Introduction

Representing only 2% of all bladder tumors inverted papilloma of the bladder is a rare benign lesion; affecting patients aged 60–70, commonly men [1].

We reported the case of a 35-year-old man diagnosed with an inverted papilloma of the bladder.

Transurethral resection is the standard treatment, follow up by cystoscopy is necessary.

Case report

A 35-year-old healthy man current smoker, no personal nor family history of urinary tract disease with a 2-month history of terminal hematuria and symptoms of lower urinary tract obstruction such as pollakiuria and dysuria. A digital rectal exam revealed a 50 g symmetrical prostate with no nodules or indurations, and the physical exam was otherwise unremarkable. Bladder ultrasounds demonstrated a polypoid bladder lesion in the trigone of the bladder (Figure 1). Cystoscopy shows normal anterior and posterior urethral segments with no restrictions, there was one small (1,5 cm) papillary lesion on the left side of the trigone. The patient underwent transurethral resection of the bladder tumor with no resection of the prostate (Figure 2). Histological diagnosis was inverted papilloma: inverted urothelial proliferation with interconnected nests and trabeculae focally connected to overlying unremarkable benign reactive urothelium and no exophytic papillary component (Figure 3). The patient has been subsequently followed up for 05 years by a cystoscopy every 6 months without any evidence of recurrence.

More Information

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Submitted: April 29, 2024

Approved: May 10, 2024

Published: May 13, 2024

How to cite this article: Marrak M, Ouanes Y, Chaker K, Rahoui M, Bibi M, et al. Bladder Benign Inverted Papilloma in Young Men: A Case Report. Arch Case Rep. 2024; 8: 048-049.

DOI: 10.29328/journal.acr.1001093

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Abbreviations: IPB: Inverted Papilloma of the Bladder



Figure 1: Ultrasound results: Polypoid lesion in the bladder trigone.



Figure 2: Transurethral resection of the papillary lesion

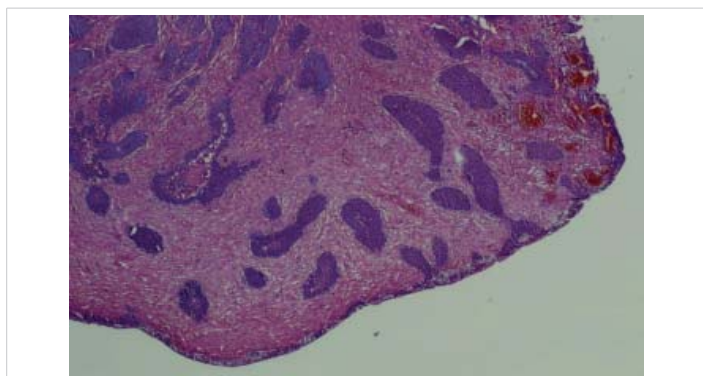


Figure 3: Histological diagnosis: tumor cells with a consistent network of trabecular and smooth contour nested arrangement; few mitotic figures.

Discussion

A rare benign tumor that can occur at any site in the urinary tract, especially present in the bladder, Inverted papilloma of the bladder (IPB) only represents 1.4% - 2.2% of all urothelial neoplasms [1]. The bladder neck region (23% - 41%) and trigone (24% - 35%) are the common sites of the IPB. Cystoscopy generally shows single lesions however in some cases we may see multiple lesions (0% - 4.2%) [2]. In our case, we have described one small (1,5 cm) papillary lesion on the left side of the trigone of the bladder near the opening of the right ureter. IPB generally affects patients aged 60-70, commonly men, with a ratio of 5.8:1 men to women [3] but in our case, the patient is aged 35. However, Smoking, chronic bladder infection, and urinary tract obstruction are suggested to be responsible for but the cause of IPB remains nowadays unclear [4].

Gross hematuria is the main symptom in smoking patients aged 60-70 years old mimicking bladder neoplasia which is the main differential diagnosis [5].

Histological criteria after transurethral resection define IPB:

1 - inverted growth pattern; 2 - smooth surface lined with mature urothelium; 3 - uniform epithelial morphology; 4- tumor cells with a consistent network of trabecular and smooth contour nested arrangement; (v) no or few mitotic figures; 6 - possible presence of microcyst formation; 7 - possible presence of non-keratinizing squamous metaplasia; 8 - no exophytic component; and (9) noninvasive [6]. IPB is a rare benign lesion of the urinary tract but its presence increases the risk that urothelial carcinomas occur that's why endoscopic surveillance is indicated for patients with IPB. Our patient had five-year cystoscopic surveillance with no recurrence.

Conclusion

Inverted papilloma of the bladder is rare, its causes remain unclear.

Diagnosed in patients at a young age suggest other causes than bladder irritation.

The diagnosis is histologic after transurethral resection of the bladder tumor. Cystoscopic follow-up is necessary.

Studies should give more interest to its etiopathogenesis to establish clear guidelines for its management.

Statement of ethics

Ethical approval is not required for this study following local or national guidelines.

Written informed consent was obtained from the patient for publication of the details of his medical case and any accompanying images.

Data availability statement: The data that support the findings of this study are available from the corresponding author upon reasonable request.

Authors contributions: Conception and Design: Mehdi Marrak, Administrative support: Moez Rahoui and Yassine Noura, Data acquisition: Mehdi Marrak, Data analysis: Mokhtar Bibi, Manuscript writing: Kays Chaker and Mehdi Marrak.

Final approval of manuscript: All authors.

Critical revision of the manuscript: Yassine Ouane and Yassine Noura.

Acknowledgement

We are grateful to all the staff of the Urology and Pathology Department of our hospital who contributed to this project.

References

1. Paschkis R. Adenome der Harnblase U. Ztschr Urol Chir. 1927; 21:315-25.
2. Potts IF, Hirst E. Inverted papilloma of the bladder. J Urol. 1963; 90:175-9.
3. Faten L, Jyotsna Pandey, Stephen W.L. In StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan.2023 Aug 28.
4. Assor D. Inverted papilloma of the renal pelvis. J Urol. 1976 Nov;116(5): 654. doi: 10.1016/s0022-5347(17)58951-x. PMID: 978824.
5. Sweeney MK, Rais-Bahrami S, Gordetsky J. Inverted urothelial papilloma: A review of diagnostic pitfalls and clinical management. Can Urol Assoc J. 2017 Jan-Feb;11(1-2):66-69. doi: 10.5489/cuaj.4136. PMID: 28443149; PMCID: PMC5403683.
6. Picozzi S, Casellato S, Bozzini G, Ratti D, Macchi A, Rubino B, Pace G, Carmignani L. Inverted papilloma of the bladder: a review and an analysis of the recent literature of 365 patients. Urol Oncol. 2013 Nov;31(8):1584-90. doi: 10.1016/j.urolonc.2012.03.009. Epub 2012 Apr 19. PMID: 22520573.