

Case Report

Open Access

Pseudo Tumor of the Bladder Simulating Cancer: Pseudotumoral Glandular Cystitis

Ibou Thiam¹, Fabrice Senghor^{2*}, Marie Joseph Dieme³, Abdou Magib Gaye¹, Amadou Ndiade¹, Kor Ndiaye¹ and Cherif Mouhamed Moustapha Dial⁴

¹Department of Pathological Anatomy, CHU Aristide Le Dantec, Dakar, Senegal

²Training and Research Unit in Health Sciences; Assane Seck University, Ziguinchor, Senegal

³Department of Pathological Anatomy, FANN Hospital, Dakar, Senegal

⁴Department of Pathological Anatomy, Hôpital Général Idrissa Pouye, Dakar, Senegal

ABSTRACT

Intestinal metaplasia of the bladder is a rare pathology, estimated at less than 1% of bladder pathologies. Some forms, including pseudo tumor glandular cystitis, can mimic cancer. We report a rare case of this pathology, little studied in our context, treated in Senegal and we underline the epidemiological-clinical and anatomopathological particularities.

Observation: Mr. MN, 26 years old, non-smoking, known epileptic, with psychomotor delay since birth (under Tegretil and Gardenal), presented with a hip's trauma, not operated on in 2012, then a left leg fracture following a traffic accident in August 2019. He consulted for recurrent terminal hematuria without urination burn, dysuria and pelvic pain. The clinical examination revealed a motor deficit, a normal prostate on rectal examination. Cystoscopy showed a solid, vegetative, ulcerated tumor lesion of the bladder, of trigonal location and of the right lateral wall without invasion sign, with ureteral meatus and permeable ureters. The rest of the devices and biological assessments examination are unremarkable. Abdomino-pelvic ultrasound revealed a semi-replete bladder with a non-significant post-void residue and 39.78 cc prostatic hypertrophy without repercussions on the upper urinary system. The patient underwent a complete and deep bladder's transurethral resection which, after histological examination, showed a pseudotumoral glandular cystitis of the bladder.

Conclusion: The bladder should be taken into account in adult patients, often males, with irritative and obstructive urinary signs. It can occur without previous bladder infection. This pathology can simulate bladder cancer from which the interest of the pathological examination which makes it possible to make the formal diagnosis.

*Corresponding author

Fabrice Senghor, Training and Research Unit in Health Sciences; Assane Seck University, Ziguinchor, Senegal, Ouest Foire, City Air Afrique, N° 21. Tel: 00221772487148; E-mail: senghorf@yahoo.fr

Received: December 19, 2021; **Accepted:** December 27, 2021; **Published:** December 30, 2021

Keywords: Bladder, Glandular cystitis, Intestinal metaplasia, Senegal

Introduction

Pseudo tumor or florida glandular cystitis is a type of intestinal metaplasia of the bladder. It is a rare proliferating disease of the urothelium bladder. It can simulate by its non-specific symptomatology, malignant bladder tumors. In some cases, this pathology precedes certain bladder cancer and is considered by some author as a precancerous lesion. We report a rare case of this rare pathology, little studied in our context, treated in Senegal and we underline the epidemiological-clinical and anatomopathological particularities [1].

Observation

Mr. M.N., 26 years old, non-smoking, known epileptic with

psychomotor delay since birth (under Tegretil and Gardenal), presented a trauma to the unoperated hip, in 2012, then a left leg fracture following a traffic accident in August 2019. He is consulted for a recurrent terminal hematuria without urination burning, dysuria and intermittent pelvic pain, of moderate intensity. The clinical examination found a motor deficit, a supple abdomen without a palpable mass. The rectal examination revealed a slight increase in prostate volume, with a smooth surface, and the rest of the urological examinations and other devices were unremarkable. The cystoscopy showed a solid bladder tumor lesion, vegetative, ulcerated, of trigonal location and of the right lateral wall without sign of invasion, respecting the ureteral meatus. The biological assessment (creatinemia 7.35mg/l) and blood lionogram are unremarkable. The cytobacteriological examination of the urine was normal. The morning urine test for schistosoma eggs, 3 days in a row, was negative. An abdomino-pelvic ultrasound was performed, objectifying a semi-full bladder,

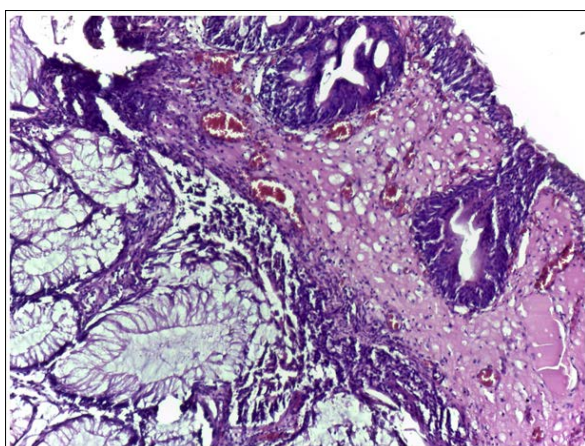
a non-significant a non-significant post-void residue and 39.78 cc of 4.43 cc, a prostatic hypertrophy measured at 39.78 cc without repercussions on the upper urinary system, the rest of the organs is unremarkable. (Figure 1) The patient underwent a complete and deep Transurethral Bladder Resection (UVRT) which was sent for pathological examination. The macroscopic examination objectified seven (07) resection copals. Histology showed colonic pseudo-tumor metaplasia of the bladder mucosa. The submucosa was the site of the intestinal type's glands, distributed in a regular way, in the lamina propria and respecting in depth the muscular plane (detrusor). These glands are lined with tall columnar epithelial cells with an apical pole open without signs of dysplasia. They are organized in pseudo-lobules surrounded by a fibro-congestive chorion, the site of a polymorphic, diffuse, mild inflammatory infiltrate. On the surface, the urothelium is regular, ulcerated in places. No histological sign of malignancy was found. It is not visualized either mitosis, necrosis, foci of carcinoma in-situ or sign of infiltration of the muscularis. He was diagnosed with bladder pseudotumoral glandular cystitis. (Figure 2) The immediate postoperative course was simple. After a 6 months' recession, the development was marked by an amendment of the clinical signs (pelvic pain, dysuria and hematuria), an absence of recurrence.

Figure 1: Abdomino-pelvic ultrasound



Prostatic hypertrophy measured at 39.78 cc without impact on the upper urinary system

Figure 2: Histological image of resection shavings from a bladder transurethral resection (Hematoxylin eosin x High Magnification)



Intestinal metaplasia of the bladder Pseudotumoral glandular cystitis: presence of numerous regular intestinal-type glands in the lamina propria of the bladder. Lurothelium is eroded in places, without evidence of dysplasia.

Discussion

Intestinal bladder metaplasia of which Pseudotumoral glandular cystitis is a rare pathology estimated at approximately less than 1% of bladder pathologies [2,3]. It mainly affects adult males. The pathogenesis of this condition is poorly defined, however different situations leading to chronic inflammation of the bladder, such as prolonged urinary stasis, or untreated bladder exstrophies, urolithiasis and chronic and recurrent urinary tract infection are mainly involved. It can be associated with pelvic lipomatosis, not found in our patient. This affection presents a clinical symptomatology depending on the extent of the bladder lesions [4,5]. It is characterized by irritative signs such as pollakiuria, obstructive signs such as dysuria and urinary retention, pelvic pain, terminal hematuria and mucosuria. Cystoscopy identifies a lesion with a plane or polypoid appearance, with a preferential trigonal location; it also assesses the state of ureteral meatus. All of these signs were partially objectified in our patient [3]. Medical imaging is often unsuccessful apart from the Florida pseudo-tumor form. Radiological signs are nonspecific and may suggest a malignant bladder tumor. Ultrasound and especially abdominopelvic CT scan with intravenous urography can rule out urodigestive fistula, especially in the context of fistulized colonic diverticulosis in the bladder. These examinations usually show one or more masses, most often located on the trigone and which may extend to the entire bladder. Moreover, we often observe a densification of the perivesical fat, not found in our observation. In our context, only lecho-abdominopelvic was performed but it did not objectify the lesion [6]. Cystoscopy with trans-urethral resection objectifies a lesion with a plane or polypoid appearance, with a preferential trigonal location, it also assesses the state of ureteral meatus. The diagnosis of this pathology is anatomo-pathological [3]. Terminal hematuria associated with this solid, vegetative, ulcerated bladder tumor lesion has led to two diagnoses [7]. Initially, pseudotumoral bladder schistosomiasis of the bladder, especially in our endemic context. This form affects approximately 7.2% of patients with urinary schistosomiasis in some studies [8]. However, no past history of freshwater swimming was found, furthermore, the search for schistosome eggs in the morning urine for 3 days in a row was negative. Secondly, a bladder tumor (benign or malignant).

Histological examination of the resection shavings was in favor of glandular cystitis.

Histology distinguishes two types

o An intestinal form or colonic metaplasia, very rare. It is characterized by the presence in the superficial chorion of colonic-type glands, organizing themselves into pseudo-lobules or being able to evolve into large clusters, conferring on a pseudo-tumor form called Florida. This form corresponds to our observation. Glandular cystitis of the intestinal type is usually confined to the lamina propria. One can find an extravasation of mucin by glandular rupture, which can lead wrongly to the diagnosis of an adenocarcinoma [9].

o Another, more frequent form resulting in a mucinous inflection of the bladder epithelium. The trigone is the preferred site of this lesion in the bladder. The differential diagnosis of this lesion arises with denocarcinoma and infiltrating urothelial carcinoma of the nest type [4]. It is based on the presence of marked atypia, glandular architectural disorder, desmoplastic stroma, muscle invasion, necrosis, high mitotic index, carcinoma in situ and the presence of isolated atypical cells floating in the mucin. Immunohistochemistry by testing for beta-catenin nuclear markers may be useful [6]. The prognosis of this pathology is controversial

in the literature, some authors consider it as a precancerous lesion of denocarcinoma of the bladder. [1,3,7] The preferred treatment for the localized florida form is endoscopic resection. However, 5% of cases can recur or progress to malignancy [1-7].

Considering an uncontrolled pathophysiology, the treated patients must be followed by endoscopic or radiological watch, although it is not codified. In our context a minimum annual cystoscopy is allowed [6].

Conclusion

The bladder pseudotumoral glandular cystitis is relatively rare. This should be taken into account in adult patients, often males, presenting with irritative and obstructive urinary signs. It can occur without prior bladder infection. Any cause of urinary stasis or chronic irritation of the bladder mucosa is a potential etiologic factor. This pathology can simulate bladder cancer from which the interest of the pathological examination which makes it possible to make the formal diagnosis. increased watch is advised, given the genesis of intestinal metaplasia that has not been controlled until now.

References

1. Yi X, Lu H, Wu Y, Shen Y, Meng Q, et al. (2014) Cystitis glandularis: A controversial premalignant lesion. *Oncol Lett* 8: 1662-1664.
2. Bryan RT, Nicholls JH, Harrison RF, Jankowski JA, Wallace DMA. (2003) The role of beta-catenin signaling in the malignant potential of cystitis glandularis. *J Urol* 170: 1892-1896.
3. Xin Z, Zhao C, Huang T, Zhang Z, Chu C, Lu C, et al. (2016) Intestinal metaplasia of the bladder in 89 patients: a study with emphasis on long-term outcome. *BMC Urol* 16: 24.
4. Touffahi M, Fredj N, Lefi M, Hafsa C, Hallara W, et al. (2007) Pseudo-tumor glandular cystitis. *Prog En Urol* 17: 968-972.
5. Benchekroun A, Zannoud M, Nouini Y, Bernoussi Z, Kamouni M (2002) Pseudotumoral colonic metaplasia of the bladder mucosa. *Remark. Prog En Urol Paris* 12: 325-328.
6. Kailavasan M, Ellis R, O'Dowd S, Sherwood B, Bazo A (2018) 'No visible lesions?' - an unusual case of Intestinal metaplasia of the bladder. *J Surg Case Rep* 8: 193
7. Intestinal metaplasia (2021) Available at: <https://www.pathologyoutlines.com/topic/bladderintestinalmetaplasia.html>
8. Merrot T, Retornaz K, Chaumoitre K, Garnier JM, Alessandrini P (2003) Pseudotumoral form of bladder schistosomiasis in children: about 2 recent observations. *Arch Pediatrics* 10: 710-712.
9. Mazerolles C (2003) Urothelial pseudoneoplastic and preneoplastic lesions of the bladder *Progress in Urol J Assoc Francaise Urol Soc Francaise Urol* 13: 1227-1231.

Copyright: ©2021 Fabrice Senghor, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.