Article

PAMJ Clinical Medicine

Case report

Primary urethra adenocarcinoma in women: case report and review of the literature

Modou Ndiaye, Ousmane Sow, Abdou Magib Gaye, Alioune Sarr, Abdoulaye Ndiath, Babacar Sine, Cyrille Ze Ondo, El Hadji Malick Diaw, Ousmane Dabo, Ibou Thiam, Yaya Sow, Babacar Diao, Alain Khassim Ndoye

Corresponding author: Modou Ndiaye, Urology-Andrology Department, Aristide Le Dantec Hospital, Dakar, Senegal. ndiaymodou87@gmail.com

Received: 02 Sep 2020 - **Accepted:** 16 Sep 2020 - **Published:** 23 Sep 2020

Keywords: Adenocarcinoma, urethra, diagnosis, woman, surgery

Cite this article: Modou Ndiaye et al. Primary urethra adenocarcinoma in women: case report and review of the literature. PAMJ Clinical Medicine. 2020;4(38). 10.11604/pamj-cm.2020.4.38.25874

Available online at: https://www.clinical-medicine.panafrican-med-journal.com//content/article/4/38/full

Primary urethra adenocarcinoma in women: case report and review of the literature

Modou Ndiaye[1,&], Ousmane Sow[1], Abdou Magib Gaye[2], Alioune Sarr[1], Abdoulaye Ndiath[1], Babacar Sine[1], Cyrille Ze Ondo[1], El Hadji Malick Diaw[1], Ousmane Dabo[1], Ibou Thiam[2], Yaya Sow[1], Babacar Diao[1], Alain Khassim Ndoye[1]

[1]Urology-Andrology Department, Aristide Le Dantec Hospital, Dakar, Senegal, [2]Department of Pathological Anatomy, Aristide Le Dantec Hospital, Dakar, Senegal

[&]**Corresponding author**

Modou Ndiaye, Urology-Andrology Department, Aristide Le Dantec Hospital, Dakar, Senegal

Abstract

The female urethra cancer is rare that accounts for less than 0.02% of all women's cancers. The diagnosis is often late and is made in more than 50% of cases at the metastatic stage. We report a case of primary urethra adenocarcinoma in a 35-year-old woman diagnosed at the localized stage. Segmental resection and meatoplasty had made. The patient had no adjuvant therapy. She was continent without recurrence oncologic.

Introduction

The female urethra cancer is rare, especially in black women [1]. The diagnosis of these tumors is generally difficult because the symptomatology is not specific. It's ignorance often leads to a significant diagnostic delay since in more than 50% of cases the diagnosis do at the metastatic stage [1]. Few case was reported in Africa [2,3]. The objective of our study was to report a case of primary urethra adenocarcinoma in women treated in our center to involve a review of the literature on the subject.

Patient and observation

A patient MDB of 35-year-old with no medical and chirurgical history, consulted a burgeoning mass, painless, bleeding, located at the anterior side of the vagina. The interrogation revealed a dysuria associated with urinary burn and urethrorrhagia evolving since 5 months. Physical examination revealed burgeoning mass of 2 cm, hard, painless and bleeding on contact circumscribing the urethral meatus (Figure 1). The distal urethral portion was hard to the vaginal examination. The peripheral lymph node areas was free and the rest of the physical examination was normal. The histology of biopsy showed urethra adenocarcinoma well differentiated. The thoraco-abdomino-pelvic computed tomography (CT-TAP) showed a normal bladder and a lack of secondary localization. Segmental resection of the distal urethra portion removing the tumor and a meatoplasty were performed (Figure 2, Figure 3). Immediate postoperative cystoscopy was normal. Trans-surethral bladder catheter placed and ablation did 10 days after the procedure. The postoperative was simple. Histology of the surgical specimen confirmed urethra adenocarcinoma well differentiated with margins healthy resection (Figure 4). The patient did not receive adjuvant therapy. After 16-month follow-up, the patient was continent without local and metastatic recurrence at Computed Tomography of Thorax, Abdomen and Pelvis (CT-TAP) control.

Discussion

The female urethra cancer is rare and accounts for 0.02% of all cancers in women [1]. Our patient had a young age compared to the mean age of diagnosis (60 years) found in the literature [1,2]. Contrary to our observation, interrogation often highlights risk factors such as chronic irritation, recurrent urinary tract infections and proliferative lesions such as papilloma, adenoma, polyp or leukoplakia [3,4]. The lesion is usually symptomatic as our patient and symptoms may include: hemorrhage, urinary obstructive or irritative symptoms [1,5]. The palpation of the tumor mass in our patient was reported by several authors [2,5]. It is described as an induration which is hard on the anterior side of the vagina. Although uncommon, a mucous ectropion or urethral prolapse should also attract attention [3]. The diagnosis was made at the early stage in our patient. However, if the diagnosis is made late, the tumor mass can become necrotic. This necrosis can be accompanied by recurrent urinary tract infection and a foul-smelling discharge [6]. Management should be done as soon as possible because the lesion may extend to the bladder neck, vagina or vulva requiring a radical cystectomy associated. The anterior urethra is drained by the superficial inguinal lymph network and deep while the posterior urethra is drained by the external iliac, hypogastric and obturator networks. No lymphadenopathy was detected in these lymph node areas on the extension assessment. However in the literature, at the time of diagnosis, a third of patients have palpable inguinal lymphadenopathy, 20% have a pelvic lymph node invasion and 15% will develop distant metastases during their follow-up [7].

In case of inguinal lymphadenopathy it is preferable, before considering an extensive treatment associated with a cleaning, to put on a short antibiotic therapy then a clinical and radio-logical reassessment [8]. The histological type depend on the primary localization of the tumor [9]. Squamous cell carcinoma is the most common histological type, it often develop on the

portion distal urethra. Urothelial carcinomas involve the portion proximal urethra and the bladder neck. Adenocarcinoma found in our patient, rare, seems to develop from a paraurethral diverticulum existing channels and comes periurethral. At this localized stage, a segmental resection was made in our patient. The most common complications of this technique are urinary incontinence and local recurrence which was not observed in our patient. In the case of a late discovery, surgery combined with chemotherapy and/or radiotherapy seems to bring better results [1,10]. For extensive lesions an anterior pelvectomy with lymphadenectomy and urinary diversion would be considered [1]. Brachy-therapy uses Iridium 192 with doses between 65 to 70 Gy in exclusive brachytherapy, and doses between 20 to 35 Gy in addition to external radiotherapy [1]. Chemotherapy is based on cisplatin in combination with 5-fluorouracil [1]. The assessment is variable and depends on the location and stage of the tumor.

Conclusion

The female urethra cancer is rare and its treatment is surgical at the localized stage. Partial surgery as in our patient, at the early stage is possible and give good results without risk of urinary incontinence. Any abnormality of urination in women should lead to a careful gynecological examination in search of this type of tumor.

Competing interests

The authors declare no competing interests.

Authors' contributions

All authors have read and approved the final version of the manuscript.

Figures

Figure 1: appearance of the mass circumscribing the urethral meatus at admission

Figure 2: appearance of the tumor after dissection and segmental resection

Figure 3: appearance of the urethral meatus immediately after surgery

Figure 4: A) carcinomatous tumor proliferation consisting of cells glandular (green arrows) with mitoses (yellow arrows) HE x 400; B) carcinomatous tumor proliferation realizing structures glandular (blue arrows) HE x 100

References

1. Dalbagni G, Zhang ZF, Lacombe L, Herr HW. Female urethral carcinoma: an analysis of treat-ment outcome and a plea for a standardized management strategy. Br J Urol. 1998 Dec;82(6): 835-841. **PubMed**| **Google Scholar**
2. Rakototiana AF, Rakoto-Ratsimba HN, Hunald FA, Razafimanjato N, Rabesalama S, Rajaobelison TM. Cancer primitif de l´urètre féminin: à propos d´un cas. Afr J Urol. 2008;14(2): 128-130. **Google Scholar**
3. Touzani MA, Yddoussalah O. Un ectropion urétral peut cacher un carcinome. Pan Afr Med J. 2017 Aug 3;27: 249. **PubMed**| **Google Scholar**
4. Rognon R. Tumeurs et formations tumorales de l´urètre. Paris. Masson; Association Française d´Urologie. 1978.
5. Hopkins SC, Nag SK, Soloway MS. Primary carcinoma of urethra. Urology. 1984 Feb;23(2): 128-133. **PubMed**| **Google Scholar**
6. Ornellas AA, Khouri FR, Campos F, Koifman N, Quirino R. Cancer de l´urètre chez la femme : expérience de l'Institut national du cancer du Brésil. Prog Urol. 1999;9(2): 292-298. **Google Scholar**

7. Grigsby P, Herr H. Comprehensive Texbook of Genitourinary Oncology. Baltimore Williams & Wilkins. 2003.
8. Rischmann P, Mazerolles C, Baron JC, Chopin D, Davin JL, Guy L *et al*. Tumeurs malignes rares de la vessie. Tumeurs malignes de l'urètre. Prog. Urol. 2000;10: 17-34.
9. Johnson DE, O'Connell JR. Primary carcinoma of female urethra. Urology. 1983;21(1): 42-45. **PubMed**| **Google Scholar**
10. Micaily B, Dzeda MF, Miyamoto CT, Brady LW. Brachytherapy for cancer of the female ure-thra. Semin Surg Oncol.1997;13(3): 208-214. **PubMed**| **Google Scholar**

Figure 1: appearance of the mass circumscribing the urethral meatus at admission

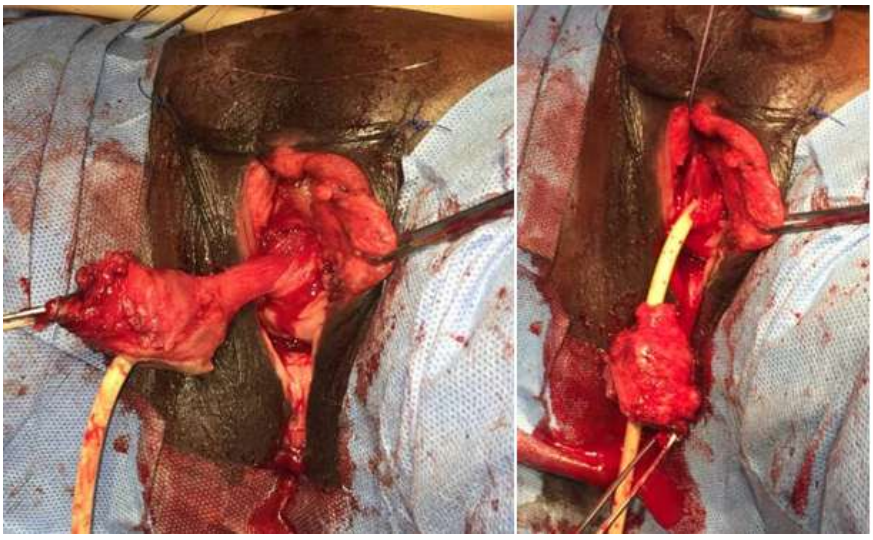

Figure 2: appearance of the tumor after dissection and segmental resection

Figure 3: appearance of the urethral meatus immediately after surgery

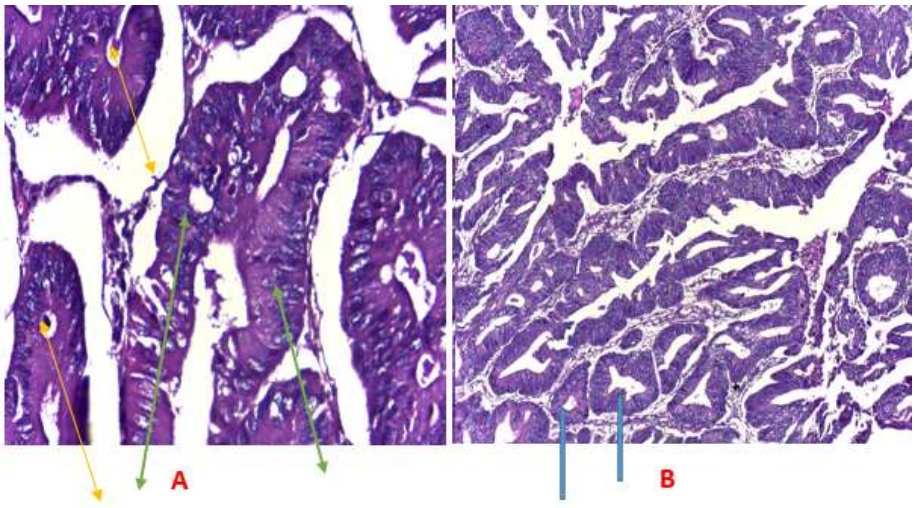

Figure 4: A) carcinomatous tumor proliferation consisting of cells glandular (green arrows) with mitoses (yellow arrows) HE X 400; B) carcinomatous tumor proliferation realizing structures glandular (blue arrows) HE X 100