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A rare Prostatic Stromal Tumor - Stromal Tumor of Uncertain Malignant Potential (STUMP) and Prostatic Stromal Sarcomas (PSS) as cultural sexual health problem in a young adult: A case report

Syarif Syarif [a,*], Abdul Azis [a], Ahmad Shafwan Natsir [b], Muhammad Zulharyahya Dandy Asmara Putra [a], Ilham Fauzan [a], Faradila Anwar [a]

[a] Hasanuddin University, School of Medicine, Indonesia
[b] Mulawarman University, Faculty of Medicine, Indonesia

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ABSTRACT

Stromal prostatic tumors, which consist of Stromal Tumors of Uncertain Malignant Potential (STUMP) and Prostatic Stromal Sarcomas (PSS), are rare diagnoses, especially in young adults, and influence culture sexual health, such as Erectile Dysfunction (ED). A 29-year-old man complained of a urinary emptying disorder and hematuria. The imaging test referred to a prostatic tumor. The first histopathologic review showed STUMP, and twice transurethral resection prostate (TURP) was found in some areas with infiltration, which leads to PSS, and others consisted of STUMP. The Erection Hardness Score (EHS) was four points before intervention and two points post-surgery.

1. Introduction

Prostate enlargement is current in middle-aged to elderly, a degenerative sign rarely occurring in young adults. Prostatic Stromal tumor of uncertain malignant potential (STUMP) is a rare case of prostate neoplasm, and it is possible to occur from a younger age, which may transform into Prostatic Stromal Sarcomas (PSS) as a malignancy stage that accounts for 0,1-0,2% of primary prostate cancer.[1,2] In young adults (18–39 years), considering their future sexual health effects, which influence their confidence in society's culture, helps establish a treatment standard.

2. Case presentation

A 29-year-old man came with a progressive urinary emptying disorder and gross hematuria for three months. On history, neither prostate disease nor neoplasm problems were found. The patient is unmarried and has no offspring.

An enlarged prostate with a flabby surface was found on digital rectal examination (DRE). Prostate Specific Antigen (PSA) test was normal range of 1,09ng/ml (2,6–10 ng/ml). Abdominal CT-Scan exhibited a 173,7ml prostate mass with clear lobulated margins and slight protrusion in the bladder (Fig. 1).

The histopathologic sample from transrectal biopsy revealed the stromal cells proliferation characterized as spindle shape, vacuolization nuclei, big chromatin, and hypercellular, which refer to STUMP (Fig. 2). Informed consent was given to explain the erectile dysfunction (ED) risk after the surgical procedure, considering the marital status.

First Urethrocystoscopy displayed full of fiber mucosa covering the verumontanum with massive blood clots and crumbly when scraped by monopolar TURP, which removed 20 cc tissue, showed some areas with only proliferation stromal cells. However, other regions indicate that stromal cell infiltration leads to suspected PSS. A Follow-up urethrocystoscopy showed progressive growth of stromal tissue with a cluttered surface after resection, and the surgeon had removed 20 cc masses in the second TURP (Figs. 2–3). Furthermore, the patient was scheduled for a subsequent follow-up in 2 months for an open prostatectomy but did not come until this paper had done.

According to the patient, lethargy had alleviated, along with decreased hematuria during therapy. The sexual health of this patient was focused on the possibility of ED post-intervention. The decreasing erection hardness score (EDS) following the patient's marital status was

* Corresponding author.
E-mail addresses: syarifbakri@hotmail.com (S. Syarif), abdul.azis031@gmail.com (A. Azis), ahmadshafwan20@gmail.com (A.S. Natsir), m.zulharyahya@gmail.com (M.Z.D.A. Putra), ilhmfauzn18@gmail.com (I. Fauzan), faradilla.anwar@gmail.com (F. Anwar).

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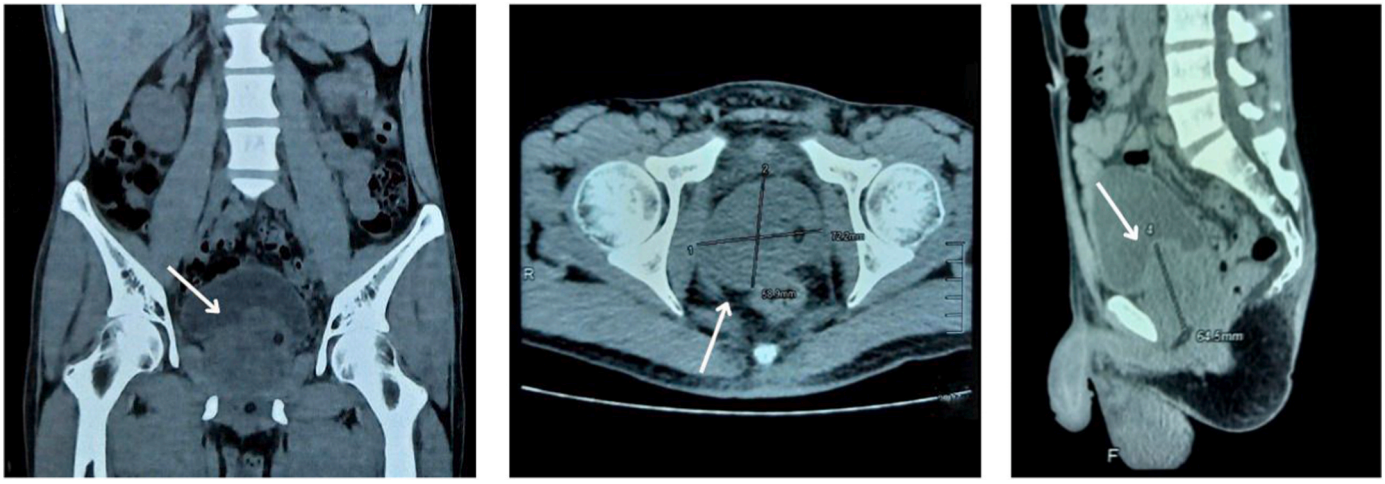

Fig. 1. The enlargement of prostate mass (indicated by arrow). (a) Coronal approach. (b) Transversal approach. (c) Sagittal approach.

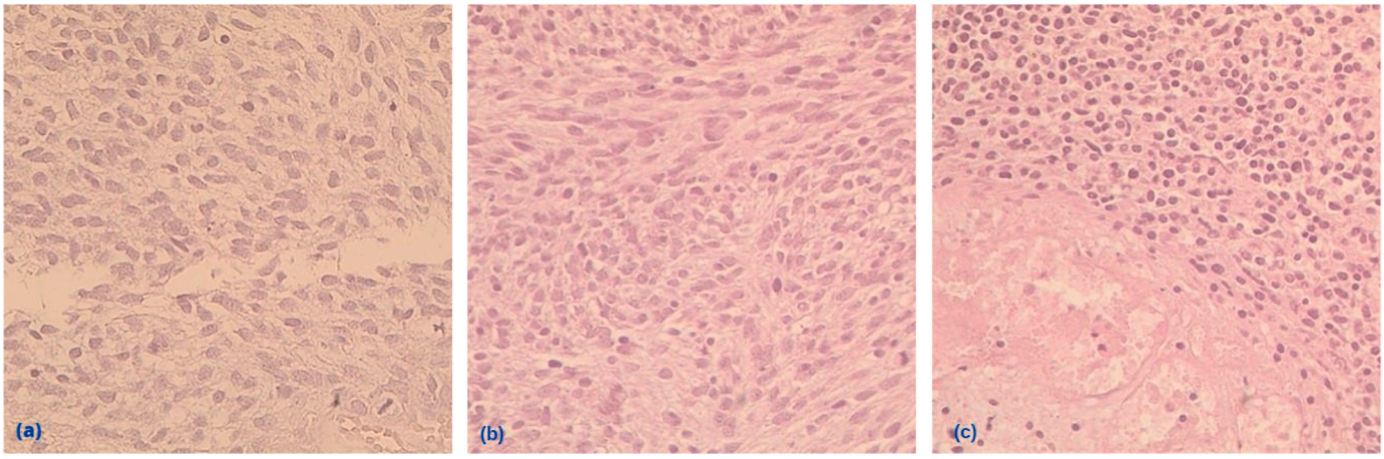

Fig. 2. (a) The first TURP Prostatic Sample showed that the proliferation of stromal cells leads to Prostatic STUMP. (b) The second TURP sample shows an area of the increase of stromal. (c) another site indicates the infiltration cell leads to suspected Prostatic Stromal Sarcomas (PSS).

obtained from 4 points before intervention to 2 points after the second TURP.

3. Discussion

There is no official epidemiology on Prostatic STUMP and PSS. Compared to other prostate tumors, directing the diagnosis to both can be one of the primary considerations in young people. Colombo et al. (2010) wrote that the main complaint of STUMP and PSS in young patients is LUTS and hematuria.[1]

Similarly, in this case, characteristics of STUMP show atypical stromal cells with enlarged nuclei with nuclear hyperchromasia and occasional multinucleation. The histology of STUMP can be distinguished into five patterns: degenerative atypia, hypercellular stroma, phyllodes-type growth, myoid, and epithelioid stromal. In Infrequent cases, epithelial proliferation occurs within the STUMP, masking it to BPH or prostate carcinoma growth.[2] The next level of STUMP is prostate stromal sarcomas (PSS), which typically is stromal infiltration with extraprostatic extension potential, overgrowth stromal cells, heteromorphic interstitial cells with pleomorphic shape, and necrosis foci.[2]

As stated above, the determination of management in STUMP and PSS is debatable. Transurethral Resection Prostate (TURP) and radical prostatectomy are the options for STUMP management, while PSS has the same methods and is probably more radical. The management of PSS consists of a combination of radical surgery, radiotherapy, and chemotherapy for long-term survival.[2]

In this case, the TURP was chosen as the initial treatment for sexual health, such as the ED. TURP has the Risk of ED, but releasing voiding symptoms after three months of TURP significantly decreases ED.[3] Bratu et al. (2017) provide therapeutic options after an intervention, such as phosphodiesterase five inhibitors, vacuum erection devices, Intra-urethral therapy with *PGE1* analog, intra-cavernosal injections, penile prosthesis implantation, and low-intensity *ESWT*.[4] The limitation of surgical equipment is a weakness in the author's treatment. The Holmium laser enucleation procedure (HoLEP) to resect the prostate is less recurrence than TURP.[5]

Generally, STUMP of the Prostate has a good prognosis but recurs in 46% of patients and requires multiple procedures. Upgrading to PSS as a malignancy can exacerbate the prognosis.[2]

4. Conclusion

The prostatic neoplasm in young adults is worried at that age, especially for young adults. Both young adults and the elderly are no different in the clinical presentation of STUMP and PSS. In this case, the TURP is the initial treatment considering the risk of ED. However, a cohort study is still needed to explain the STUMP and PSS treatment algorithm, especially in young adults.

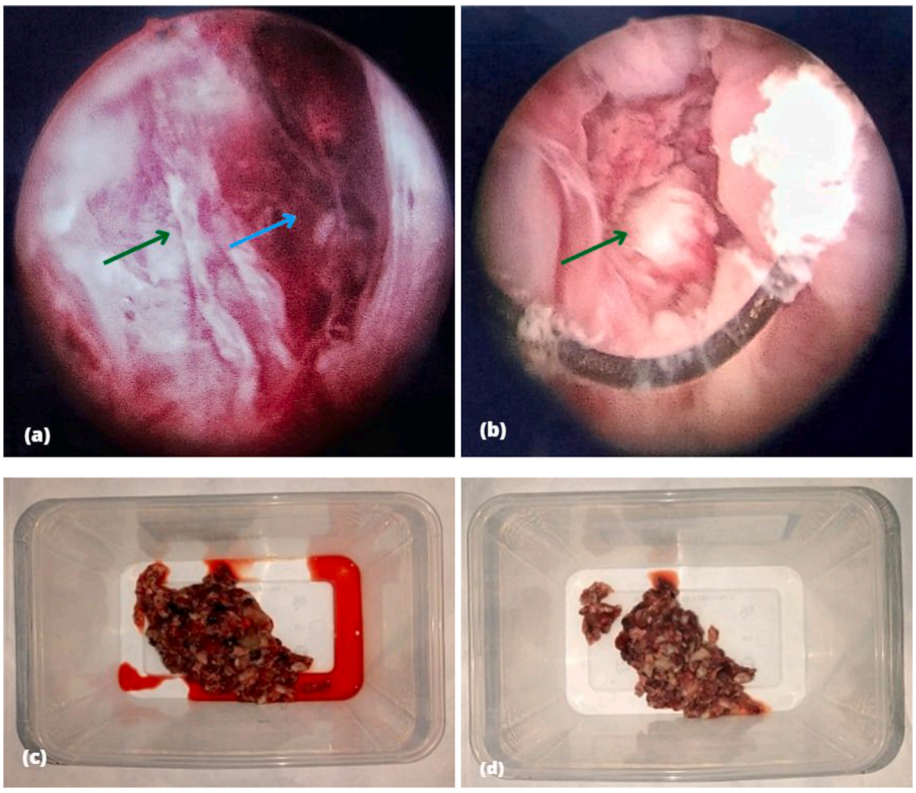

Fig. 3. Urethroscopy views. (a) The first Urethroscopy was full of STUMP tissue fibers (green arrow) and blood clots (blue arrow). (b) The Second Urethroscopy 2 weeks after TURP exhibits possessive proliferation (green arrow). The Prostate Tissues after Resection. It had crumbly consistency and mixed with blood clots. (c) First TURP. (d) Second TURP. (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article.)

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