Case Report

A Rare Prostatic Diagnosis of an Old Man: A Pure Prostatic Leiomyoma

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Received 27 May 2013; Accepted 24 July 2013

Academic Editors: S. K. Hong and F. M. Solivetti

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A pure leiomyoma of the prostate is a rare benign tumor. An 82-year-old man was referred to our urology department with gross hematuria and complete urinary retention. Examination revealed a benign prostatic hyperplasia. Transrectal ultrasound showed a prostate of 125 mL. Serum PSA was 1.9 μg/L. A simple retropubic prostatectomy was performed. Histopathological examination showed a pure leiomyoma of the prostate, without the presence of glandular prostate tissue. The diagnosis, characteristics, and treatment of this tumor are described.

1. Background

A leiomyoma of the prostate is a relatively rare benign tumor of the prostate of smooth muscle origin. Most cases are diagnosed at histopathological examination after prostate biopsies or a resection of the prostate. We present a patient in whom the entire specimen, after retropubic prostatectomy, consisted of smooth muscle, a pure leiomyoma.

2. Case Presentation

An 82-year-old man presented at the urology department with intermittent painless gross hematuria and LUTS. His previous medical history was diabetes mellitus type II, stroke, and myocardial infarction with a CABG and use of coumarin. On digital rectal examination, a smooth, firm, and elastic enlarged prostate was palpated. Laboratory tests showed a serum PSA of 1.9 μg/L. Urethroscopy, a CT intravenous pyelogram, and urinalysis revealed no abnormalities. The haematuria was referred to as a prostatic bleeding to benign prostatic hyperplasia. Tamsulosin and dutasteride were started, which improved urination, and hematuria no longer occurred. One year later, the patient presented with acute urinary retention and received a catheter. The urodynamic study showed infravesical obstruction with a normal detrusor contraction. Transrectal ultrasound showed a gland of 125 mL, with no abnormalities. A straightforward simple retropubic prostatectomy was performed. Postoperatively postvoid residual was low, and the patient was discharged. After restarting his coumarin, gross haematuria with clot retention occurred, for which hospitalization and conservative treatment were followed.

Histopathological examination showed a spindle cell tumor with no atypical smooth muscle cells (Figure 1), and the cells were positive for desmin and smooth muscle actin (SMA) (Figures 2 and 3). There was no evidence of malignancy, and no glandular prostatic tissue was found, so the diagnosis was a pure leiomyoma of the prostate.

3. Discussion

A leiomyoma of the prostate is a rare pathologic finding, especially when no glandular prostatic tissue is present. Therefore, we call it a pure leiomyoma [1, 2]. The first case report of a leiomyoma of the prostate—found at autopsy—was published in 1876. It described a leiomyoma of the prostate...
A pure leiomyoma of the prostate is a rare, benign disorder with complete absence of glandular prostatic tissue, diagnosed by histopathological examination. This paper shows that, in case of a pure leiomyoma, presentation can be also with gross haematuria, and a simple retropubic prostatectomy is an appropriate treatment for an elderly man.

### Consent

Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the editor of this journal.

### Conflict of Interests

The authors declare that they have no conflict of interests.

### References
