

Case Reports

Huge Benign Prostatic Hyperplasia

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Introduction

When prostate gland grows massively in an intravesical direction, diagnosis, both radiographically and clinically may be difficult. Although modern imaging techniques have increased the diagnostic yield, it may mimic other lower urinary tract and pelvic diseases. We report a huge filling defect in the bladder caused by intravesical enlargement of the prostate and discuss differential diagnosis.

Case report

A 47-year-old male was admitted with lower urinary tract symptoms (LUTS). The patient complained of straining, nocturia, dysuria, hesitancy, and severe constipation. On rectal examination, a firm, small, and smooth prostate thought to weigh approximately 20 gr with a large pelvic mass above the prostate were palpated. Blood chemistry and urinalysis were normal, but serum prostatic specific antigen (PSA) level was 69 ng/ml. Ultrasound revealed a pelvic solid mass. Additional transrectal ultrasound did not confirm intraprostatic location of a solid structure. CT scan and magnetic resonance imaging (MRI) only depicted a solid pelvic mass measured 9 × 10 cm (fig. 1).

On urethrocytoscopy, prostatic urethra was normal, but bladder outlet was completely obstructed. Histopathological examination of needle biopsies from the mass, demonstrated benign prostatic hyperplasia.

A suprapubic surgical approach to the bladder

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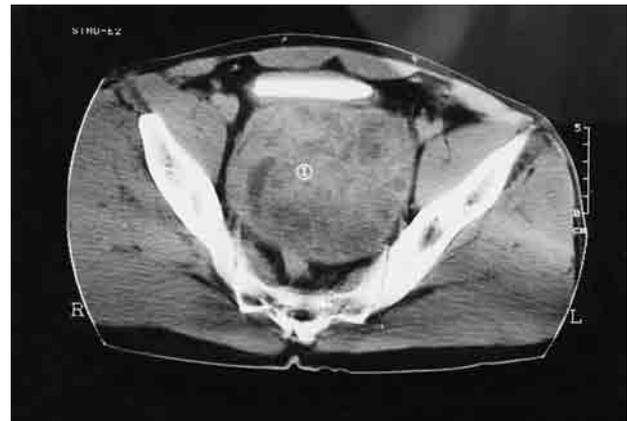


FIG.1. CT scan demonstrated a huge intravesical mass, occupying most of the bladder.

was performed. A pedunculated lesion arising from the bladder neck was noted. The mass was enucleated. It weighed 508 gr and consisted of stromal and glandular hyperplasia. The postoperative course was uneventful. Serum PSA level, three months after surgery, was 2.6 ng/ml.

Discussion

Median lobe enlargements tend to push intravesically and produce marked filling defects in the floor of the bladder.

Clinical diagnosis of solitary subcervical or median lobe hypertrophy can be quite difficult. Rectal examination is not only unsatisfactory, but may even be misleading for, if the lobe grows intravesically, it cannot be felt through the rectum. Symptomatology may not be proportional to the degree of hyperplasia. Huge enlargement of the gland in an intravesical direction may give minimal symptoms. The radiographic differential diagnostic possibilities, considered for filling

defect within the bladder, include defects caused by blood clot, solitary vesical calculus, bladder tumor, or an extravescical mass arising posterior to the bladder. Retrovesical masses include prostatic utricle cyst, prostatic abscess, seminal vesicle hydrops, seminal vesicle cyst, seminal vesicle empyema, large ectopic ureterocele, and connective tissue tumors such as myxoid liposarcoma and malignant fibrous histiocytoma.⁽¹⁾ Occasionally, radiological differentiation of these conditions may be impossible. Ultrasonography may be especially helpful in confirming the cystic nature of a mass, even if it contains high-density hemorrhagic fluid, and localization of large cysts close to the bladder. Transrectal ultrasound has been increasingly popular as a diagnostic tool to evaluate the prostate and seminal vesicles. It is essential to minimize the possibility of missing important clues and achieve accurate diagnostic imaging studies, such as CT scan and/or MRI.⁽²⁾ CT scan accurately demonstrates the anatomical

relationship of associated internal pelvic organs. In our patient CT scan and MRI only disclosed a solid pelvic mass without localization of it into the prostate. Others have stressed the usefulness of endorectal MRI, which may provide further diagnostic information of the pelvic mass.⁽³⁾

Occasionally, preoperative or intraoperative biopsy and histopathological examination remains the key for diagnosis.

References

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