

# Giant Cystadenoma of Prostate

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## INTRODUCTION

Giant cystadenomas of prostate are rare entities.<sup>(1)</sup> The ideal management of these lesions is unclear as only few isolated reports exist in the literature.<sup>(2-4)</sup> We report a case of prostate cystadenoma that had recurrent growth due to incomplete tumor resection. It appears that anything short of complete resection can cause recurrence as evident from a literature search by the authors.

## CASE REPORT

A 57-year-old man had presented with acute urinary retention 1.5 years earlier, and subsequent evaluation had revealed a cystic multiloculated mass compressing

the bladder. An excision biopsy had been done, reported as benign. He had been symptom-free for nearly 1 year until he had experienced burning micturition and difficulty in passing urine, once again. He had been found to have a regrowth of the mass, and laparotomy and incomplete removal of the mass had been performed in January 2007. The remnant had been reportedly marsupialized to the peritoneal cavity due its predominantly cystic nature.

The patient, however, had recurrence and presented to our institution in May 2007 with a mass in the lower abdomen. He had no lower tract symptoms this time and his bowel habits were

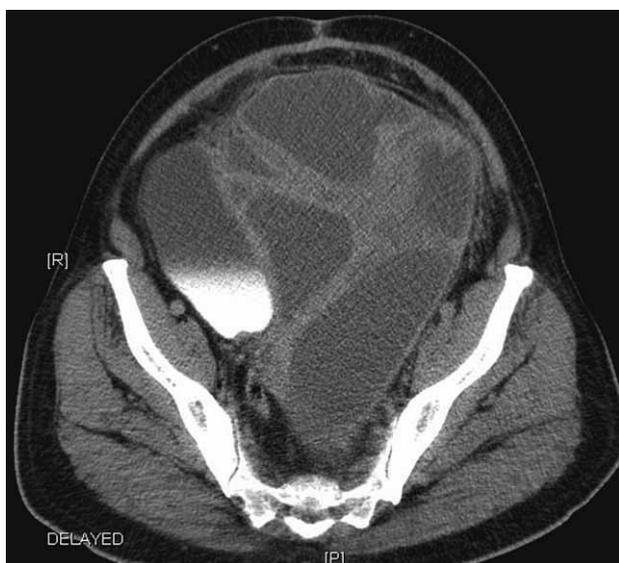
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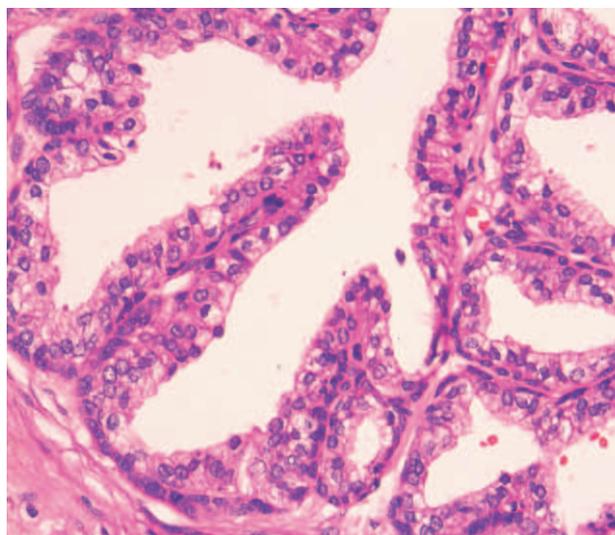
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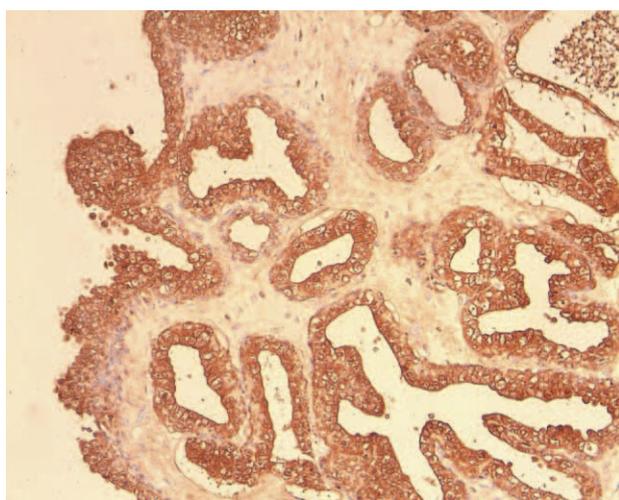
**Figure 1.** Contrast enhanced computed tomography revealed a large heterogeneous, multiloculated, predominantly cystic mass in the pelvis arising from below the bladder extending up to the lower abdomen. Note the bladder (with contrast) pushed to the right.



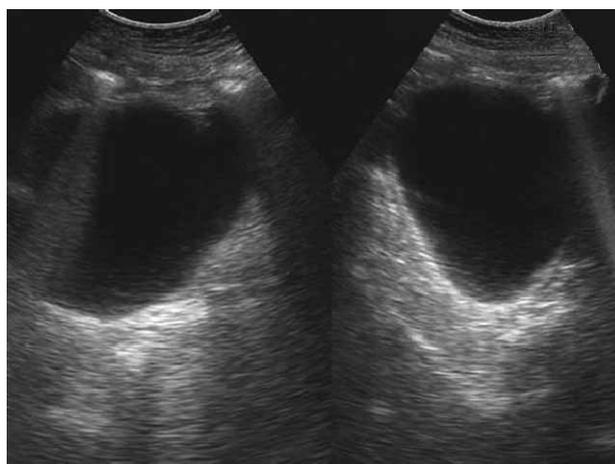
**Figure 2.** Areas of tumor were revealed on pathology examination composed of closely packed glands, lined by double layers of inner columnar secretory cells without significant cytological atypia and outer preserved basal cell layer. Also can be seen is papillary infolding of the epithelium (hematoxylin-eosin,  $\times 400$ ).

normal. He had no history of hematuria or fever, either. Physical examination revealed a well-healed midline scar with a firm globular mass in the abdomen, extending from just above the umbilicus to the pelvis. The lower limit of the swelling could not be assessed. Rectal examination disclosed a large pelvic mass, from which the prostate was indistinguishable. Contrast-enhanced computed tomography revealed a large heterogeneous, multiloculated, predominantly cystic mass in the pelvis arising from below the bladder extending up to the lower abdomen, probably from the seminal vesicle or the prostate and pushing the bladder to the right (Figure 1).

The patient underwent laparotomy and a tense multiloculated firm-to-cystic mass was found arising from the bladder base into the abdominal cavity well above the level of the umbilicus. Bladder sparing surgery was done as the frozen section and the aspirate from the cyst pointed to a benign lesion (Figure 2). The bladder was bivalved, the ureters canulated, and the entire mass dissected off the bladder. Immunohistochemistry tests were performed, and the specimen was stained positive for prostate-specific antigen (Figure 3). The patient had an uneventful recovery. He was voiding satisfactorily and to completion. Ultrasonography 3 months after the operation showed a clear prostatic fossa and no sign of recurrence (Figure 4), and serum prostate-specific antigen level was 0.4 ng/mL.



**Figure 3.** Immunohistochemistry examination showed lining epithelium exhibiting strong and diffuse immunostaining for monoclonal prostate-specific antigen. (Monoclonal prostate-specific antigen,  $\times 200$ )



**Figure 4.** Follow-up ultrasonography showed clear prostatic fossa, and no recurrence was noticed.

## DISCUSSION

Cystadenoma of the prostate is often categorized as retrovesical mesenchymal tumors not only on account of its rarity, but also because of the fact that distinguishing it from cystadenocarcinoma as well as the other tissue elements can be difficult.<sup>(2)</sup> The cystic spaces of the cystadenoma is lined by a single layer of cuboidal cells, with nuclei presenting no atypia or prominent nucleoli. These cells appear similar to the prostatic acinar columnar cells that co-express prostate-specific antigen and prostate acid phosphatase. The outer basal layer is preserved (Figure 2). In contrast, the cells lining the cystadenocarcinoma show nuclear stratification, papillary proliferations, and roman arch structures. Nuclear enlargement and prominent nucleoli are uniformly present. The growth pattern of the cystadenocarcinoma is invasive, with haphazard destruction of intervening prostatic parenchyma and aggressive invasion into the periprostatic adipose tissue.<sup>(2)</sup> Prostate-specific antigen staining can disclose the prostatic origin of this lesion.<sup>(3,5)</sup>

The clinical features of these lesions have been well described.<sup>(1)</sup> They present with voiding problems, are located retrovesically, and are often adherent to the bladder base. They may cause hydroureteronephrosis. They tend to be multiloculated and hence need to be managed by complete excision.<sup>(4)</sup> The presented patient had undergone incomplete removal before presenting to us; hence, he had 2 recurrence episodes.

In conclusion, retrovesical cystadenoma should be considered as a differential diagnosis in a mass of pelvic origin. It is important to determine the source of the lesion and an attempt at complete removal should be made while excising the lesion.

### CONFLICT OF INTEREST

None declared.

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