

PAPILLARY CYSTOADENOCARCINOMA OF THE PROSTATE

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We report a papillary cystadenocarcinoma of the prostate found in a 66-year-old man presenting with gross hematuria. The tumor was identified as prostatic in origin because of positive immunohistochemical staining of prostate specific antigen.

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Key words: Prostatic carcinoma, Papillary cystadenocarcinoma, Prostate specific antigen

INTRODUCTION

Wesson classified prostatic cysts into congenital and acquired ones¹⁾. He further subdivided them into two types; cysts associated with carcinoma of the prostate and simple retention cysts. The latter is a common type of prostatic cyst²⁾, while the former is very rare³⁻⁵⁾.

CASE REPORT

A 66-year-old man presented with asymptomatic gross hematuria of 2 weeks duration. Physical examination revealed no marked changes in the abdomen. A soft mass was palpated at the left of prostate though rectum. Blood counts, liver and renal functions were within normal limits. Plasma prostate specific antigen (PA) and γ -Seminoprotein (γ -Sm) levels were elevated, but the prostatic acid phosphatase level was within the normal limit.

Urine cytology was negative. A barium enema showed upward displacement of the sigmoid colon. Excretory urography (I-VP) revealed elevation of the bladder neck. Cystoscopically, the area from the bladder neck to left lateral wall was markedly elevated, while the site was covered with normal epithelium. However, the posterior urethra and verumontanum were intact. Retrograde urethrogram showed slight dilatation of the prostatic urethra. Comput-

erized tomography (CT) demonstrated a large cyst on the left posterior side of the

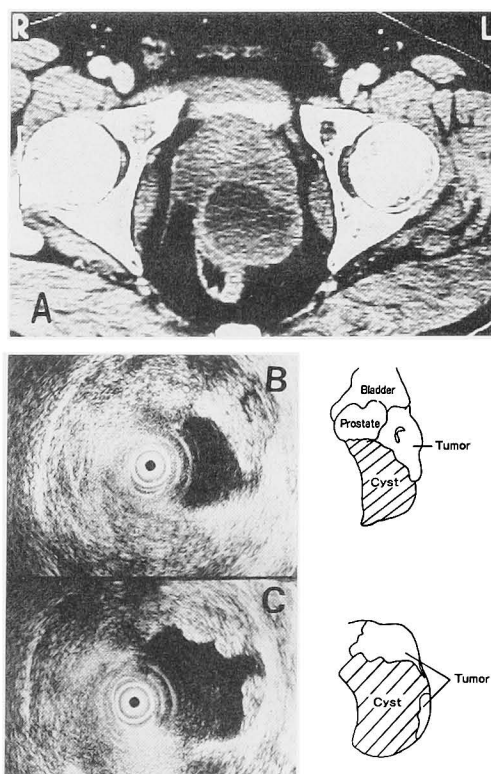


Fig. 1. A. CT of a large cystic lesion posterior to the prostate. B. C. Transrectal sonogram of the cystic lesion. A mass lesion adjacent to the cystic lesion at left side of the prostate and also protruding into the cyst.

prostate, which had an irregular wall near the prostate. A transrectal sonogram demonstrated a large cyst arising behind the bladder wall and compressing the prostate from the left side. A mass shadow protruded into the cyst from the prostate side (Fig. 1). A vesiculogram showed median displacement of the left seminal vesicle. The cyst fluid obtained by fine needle aspiration was bloody and negative for parasites, bacteria and sperm, but contained highly suspicious adenocarcinoma cells.

Exploration of the pelvis revealed a large cyst at the left side of the prostate. The cyst could not be dissected from the prostate, and adhered tightly to the rectum. Therefore, total antegrade prostatectomy with the cyst was performed (Fig. 2). The histopathological diagnosis was papillary cystoadenocarcinoma highly suspicious of prostatic origin (Fig. 3). The surgical margin of the rectum side was tumor positive. No lymphnodes in the pelvis that we

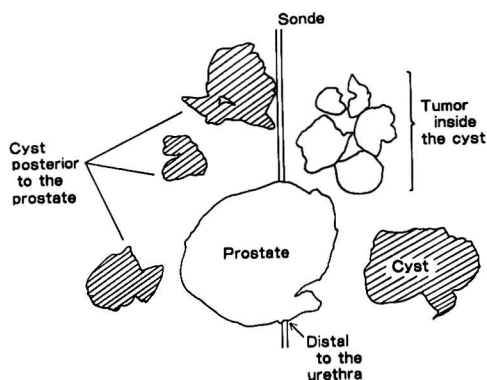


Fig. 2. Gross appearance of the resected specimen.

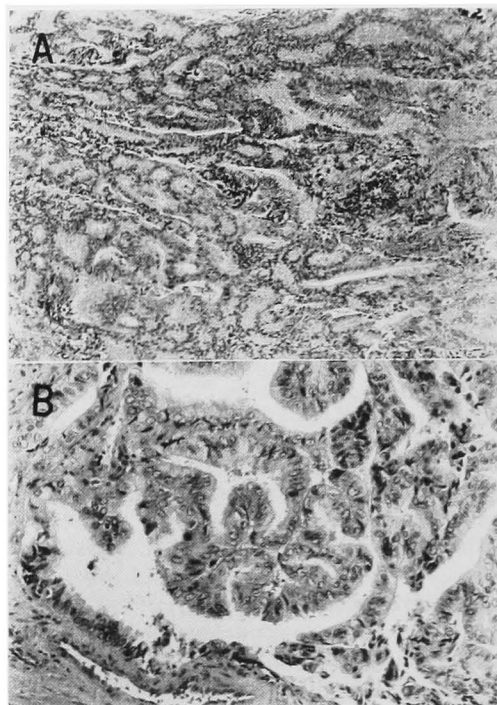


Fig. 3. Microscopic pictures demonstrating papillary cystadenocarcinoma. H.E. Staining. Reduced from $\times 40$ (A) and $\times 100$ (B).

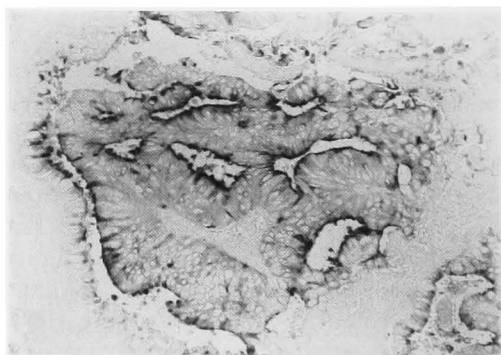


Fig. 4. Immunohistochemical staining of cancer cells with PA. Reduced from $\times 100$.

dissected were tumor positive. There was no epithelial lining inside the cyst at the portion other than tumor site. Cancer cells were immunohistochemically PA positive (Fig. 4). Immunohistochemical staining for PA was performed by the Avidin-Biotin Complex method. PA antibody was purchased from Bio Genex Laboratories

(San Raman, CA). Postoperative course was uneventful and the postoperative combination chemotherapy with ifosfamide, 5-fluorouracil and cisplatin was done 8 times a month. The patient remained free of the disease over one year after the operation.

DISCUSSION

The mullerian duct cyst usually occurs in the midline above the base of the prostate. Cystic tumors of male pelvis at one side of the midline as observed in our case usually diverticula of the ejaculatory duct or cysts of either ampulla, seminal vesicle or prostatic cysts. In our case, a vesiculogram revealed displacement of the left seminal vesicle to midline direction and CT demonstrated a large cyst at the left posterior site of the prostate. In addition, the fine needle aspiration cytology of the cyst and the elevation of serum PA and γ -Sm levels further suggested malignant tumors in the cystic lesion of prostatic origin. Two etiologies for cysts associated with carcinoma of the prostate have been sug-

gested: 1) secondary cysts associated with carcinoma and 2) primary cyst with associated carcinoma³⁾. Several cases of the first type have been reported^{3, 5)} and the second type appears to be rarer than the first type⁴⁾. In our case, the cyst had no epithelial lining except for the lesion of carcinoma proliferated in papillary pattern, which indicated that it was a secondary cyst associated in with carcinoma.

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和文抄録

前立腺乳頭状嚢胞腺癌の1例

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前立腺乳頭状嚢胞腺癌の1例を報告する。患者は66歳, 肉眼的血尿を主訴として当院を受診した。前立腺全摘術施行し, 本症例は免疫組織化学的手法にて前立

腺特異抗原陽性であったため, 前立腺由来の腫瘍であることを確認しえた。

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