Case Report

Giant benign prostatic hyperplasia with large bladder stones

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The giant hyperplasia of the prostate is extremely rare pathology of prostate gland. Here, we report the successful removal of a giant BPH (312 g) with multiple bladder stones in a 75-years-old man with severe LUTS (30 IPSS) by supra-pubic prostatectomy.

Key Words: Giant BPH, Prostatectomy, Bladder stone

INTRODUCTION

Benign prostatic hyperplasia (BPH) often produces chronic and progressive lower urinary tract symptoms or complications as bladder stone, leading many men to seek treatment. Prostatic enlargement due to BPH rarely exceeds 100 g, which occurs in only 4% of men over 70 years of age [1]. Giant BPH is arbitrarily defined as specimens over 200 g [2] or 500 g [3]; the lower threshold was suggested by Japanese authors [2]. Probably due to the low incidence of BPH in Japan [4]. The largest prostatic adenoma is ever removed by supra-pubic prostatectomy is weighed 820 grams, but he died after surgery due to hemorrhage [5]. We report a case with a 312 g benign prostatic hyperplasia with large bladder stones that was removed by supra-pubic prostatectomy in one piece successfully with 9 large stones.

Case representation and management

A 75-years-old man was hospitalized because of severe LUTS (30 IPSS) with frequent history of catheterizations for urine retentions. The routine laboratory findings were normal and rectal digital examination of the prostate was grossly enlarged. The total PSA levels were 12 ng/ml. The prostatic volume that measured at transrectal ultrasound by \( V = \frac{\pi}{6} \times w \times l \times h \) was about 349.78ml. Supra-pubic prostatectomy was performed and the large adenoma was enucleated completely in one piece with 9 large stones (Figures 1, 2). Blood loss was negligible and there were no operative complications. The removed specimen was 15 × 10 cm in diameter and weighed 312 g. Pathologic examination revealed prostatic benign glands hyperplasia with systemic chronic inflammation. The Foley catheter was removed after one week, and the patient was able to void without difficulty and discharged next day. At 3 and 6 month's follow-ups, the patient was voiding satisfactorily and was continent.

DISCUSSION

Benign prostatic hyperplasia (BPH) is a common problem experienced by aging men that can lead to serious outcomes, including acute urinary retention and bladder stone formations. Excessively large prostate hypertrophy weighing more than 200 g [3] or 500 g [6] is defined as giant prostatic hyperplasia. In Japanese literature, there were 33 cases that have been weighed more than 200 g [7]. The management of symptomatic BPH that has failed conservative therapy is usually transurethral resection of the prostate (TURP). Although new minimally invasive techniques present an alternative to TURP for small-size prostates, the only validated alternative for large prostates (greater than 75 g) is the open prostatectomy as established method. Suprapubic prostatectomy is the enucleation of the hyperplastic prostatic adenoma through an extraperitoneal incision of the lower anterior bladder wall. This operation is ideally suited for patients who
Figure 1: KUB shows multiple bladder calculus

Figure 1: giant BPH specimen & bladder stones

have a large median lobe protruding into the bladder, a concomitant, symptomatic bladder diverticulum or a large bladder calculus, although in recent reports prostatectomy has been done for giant BPH by laparoscopy and transurethral electro vaporization [6, 7, 8,9]. we think that the large and multiple bladder stones in beside of giant BPH of our case have made it one of interesting and rare cases that reported before. We performed simple supra-pubic prostatectomy and the prostatic adenoma was removed in one piece successfully with all bladder stones.

* = lower urinary tract symptoms

** = International Prostate Symptom Score

REFERENCES