

Giant benign prostatic hyperplasia. A case report

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Case Report

UROLOGY



Abstract: “Giant hyperplasia” of the prostate is a rare pathology of the prostate gland. There is currently no consensus on its definition, but in the literature, it is accepted from 200-500 grams. We report a case of a 78-year-old male patient with giant benign prostatic hyperplasia, which underwent open surgery. As a complication, there was significant bleeding in the immediate postoperative period, which required reoperation to control the bleeding with packing. The patient was discharged 6 days after surgery, and during his follow-up he evolved satisfactorily without the presence of urinary symptoms.

Keywords: Prostatic hyperplasia, giant prostatic hyperplasia, adenomatous prostatic hyperplasia, chronic prostatitis.

Introduction

Benign prostatic hyperplasia (BPH) is pathologically characterized by cellular proliferation of the epithelial and stromal elements in the prostate¹ which causes increased volume and may lead to compression of the urethra and manifest obstructive urinary symptoms. An average BPH volume of 83 ml has been reported² and only 4% of men older than 70 reach a volume greater than 100 grams.³ There is no consensus to define giant prostatic growth, some authors have defined it as greater than 200 or 500 grams.^{4,5} In this study, we report a case of giant HPB (210 grams) which was removed by retropubic prostatectomy with intraoperative complications but successful resolution.

Case report

A 78-year-old man with a history of obstructive urinary symptoms and acute urinary retention managed with Foley’s urinary catheter placement presented with a prostatic ultrasound study that reported grade III prostatic enlargement and serial PSA 7.3 ng/mL. At abdominal physical examination no abnormalities were found, rectal examination showed an augmented prostate size but no clinical features of malignancy, laboratory results depicted normal levels of leukocytes, hemoglobin and platelets, whereas normal levels of creatinine and serum electrolytes, as well as a recent PSA measured at 9.6 ng/mL. The patient underwent a retropubic prostatectomy, a giant prostate of 210g of weight was reported (**Figure 1**). During immediate post-operative period the patient presented profuse transurethral bleeding (**Figure 2**) and obstruction of the urinary catheter secondary to intravesical clots. Reintervention was needed to drain and drain the blood clots.

The prostatic bed presented with a discrete bleeding, initially was unsuccessfully managed with hemostatic stitches using chromic suture, gauze packing was also needed to control the hemorrhage, achieving hemostasis after to 150 minutes of surgical time and 2,300 mL of intraoperative bleeding. During the surgery the patient received 4 packed red blood cells units (PRBC) and 1 fresh frozen plasma unit (FFP). 48 hours after surgery surgical re-exploration was performed with no evidence of active bleeding. The patient was discharged home six days after surgery. Histopathologic study reported fibromuscular and adenomatous hyperplasia, and chronic prostatitis. The triple lumen urinary catheter was removed 2 weeks after surgery in the office, without complications associated to the surgical procedure. At one year after follow the patient no present symptoms associated to the surgical procedure.



Figure 1. Giant benign prostatic hyperplasia.

From the Department of Surgery at North Central Hospital of PEMEX. Mexico City, Mexico. Received on September 16, 2020. Accepted on September 21, 2020. Published on September 22, 2020.

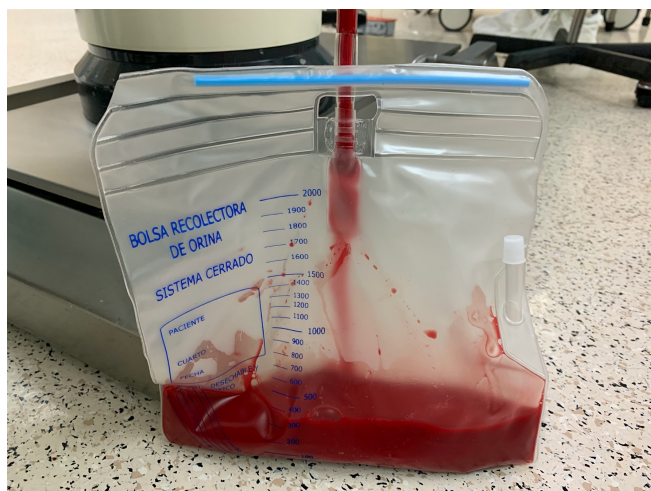


Figure 2. Urine collecting bag with hematuria in the immediate postoperative period.

Discussion

Prostatic benign hyperplasia it's one of the most frequent urological problems and the most frequent benign neoplasia in American men. Most of the patients present a prostatic volume of less than 100 mL, endoscopic treatment is the gold standard for this group of patients. Nevertheless 4% of men older than 70 years old develop a prostatic volume larger than 100 mL, in these cases open surgical treatment is indicated and higher prevalence of complications are reported during and after surgery. In the medical literature exist few cases of benign prostatic hyperplasia with a volume higher than 200 grams, thus the evidence of the best treatment and prognosis is poor, for this reason it is important to have a recent imaging study before surgical intervention to decide and to plan the surgical approach.

Conclusion

Although giant prostatic hyperplasia (> 200 grams) is infrequent, it predisposes to bleeding during open prostatectomy, which is one of the main complications associated with the procedure, as a greater need for transfusion has been observed in prostates weighing more than 100 grams so it is important to know the dimensions of the prostate before performing the intervention. In the above presented case, transfusions and packaging was needed to control the surgical bleeding.

Conflicts of interest

None.

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