



Research Paper

## Giant Benign Prostate Enlargement In A Patient With Scoliosis; A Case Report

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**ABSTRACT:** Benign prostate enlargement is a common health problem among men. The symptoms can be worrisome. Giant prostates can also cause compressive like pedal, oedema and reduced peripheral pulses. We are reporting a giant benign prostate of 568g. Our patient is an eighty four year old man with scoliosis. He initially presented with severe lower urinary tract symptoms. He had multiple episodes of acute urinary tract retention. Preoperative evaluation showed he was fit for surgery. He had an open prostatectomy and was discharged home.

Giant prostates are not common and pose challenges to the urologist. These challenges are more pronounced in the elderly patients and in one with back deformity.

### KEY WORDS

Giant prostate, Benign prostate enlargement

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### I. INTRODUCTION

Benign prostatic enlargement is common among middle aged and elderly men.<sup>1</sup>The patients with may present with voiding and storage Lower urinary tract symptoms (LUTs), haematuria, urine retention and renal failure<sup>2</sup>. Giant benign prostate hyperplasia (GPH) are prostates with volumes greater more than 500g<sup>3</sup>. In addition to the above symptoms patients with GPH may present with compressive symptoms such as oedema of the lower limbs and reduced peripheral pulses<sup>4</sup>.

Evaluation of these patients will include: accessing their international prostate symptom score, prostate and abdominal ultrasound scan, prostate specific antigen and uroflowmetry

### II. CASE REPORT

We are presenting an 84 year old man referred from the Primary health care board for benign prostate enlargement (BPE) with recurrent urinary tract obstruction.

He had a preceding history of lower urinary tract symptoms (LUTS) characterized by hesitancy, weak urine stream and intermittency. He also had frequency and nocturia but no haematurianecroturia or lithouria. No weight loss, abdominal distension, jaundice or low back pain. There was no known family history of prostate cancer. Symptoms progressively got worse until he had an acute urine retention (AUR) which was relieved by urethral catheterization. He was placed on a combination of alpha adrenergic blocker and phosphodiesterase inhibitor following which he had a successful trial without catheter. He however had three more episodes of AUR. After the third AUR he had supra-pubic catheterization due to failed urethral catheterization.

He had scoliosis and could not stand straight from birth (Fig 1). He can walk with a walking stick and can lie down flat.



**Figure 1:** Clinical photograph of the patient showing his back.

On examination he was not pale, afebrile, anicteric, not dehydrated. He had a supra-pubic abdominal fullness and a supra pubic catheter in situ.

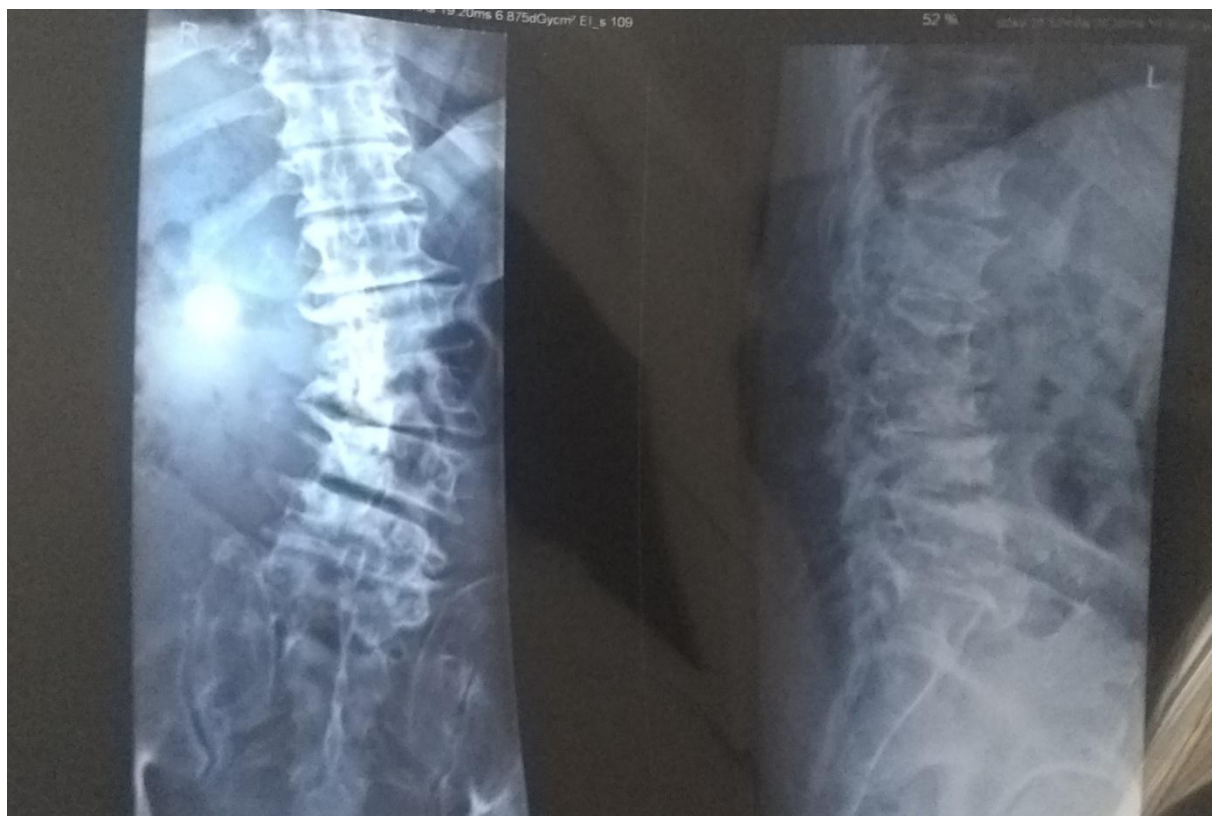
He had good perianal hygiene, normal anal sphincteric tone, prostate was markedly enlarged, firm, not tender, rectal mucosa was freely mobile over the prostate.

Heamoglobin, electrolytes, urea and creatnine were all within normal range. His prostate specific antigen level was 89.6ng/ml. Prostate scan revealed a very large prostate with a volume of 563g. He had a prostate biopsy done which revealed benign prostate hyperplasia with a focus of high grade pin. His clotting profile was also normal. He had a retrograde urethro-cystogram and a micturatingcysto-urethrogram done and they were normal.



**Figure 2:** Enucleated Prostate tissue

Lumbosacral x ray done showed severe lumbar spondylosis and spondylolisthesis. (fig. 3) His echocardiography showed a left ventricular ejection fraction of 85%. His clothing profile was normal. He was reviewed by the anaesthetist and cleared for surgery.



**Figure3:**Radiograph showing severe Scoliosis and Lumbar Spondylosis

He had an open transvesical prostatectomy. Prostate was enucleated and tissue was sent for histologic analysis. Intraoperative haemodilution was done with 1.5L of normal saline. Electrocautery in the prostatic fossa and sutures at 5 and 7 O clock positions were used to achieve adequate haemostasis. Estimated blood loss was 250ml.

Irrigation of the urinary bladder was commenced after the bladder had been closed in two layers to prevent cloth retention. Adequate analgesia using non-steroidal anti-inflammatory drugs and opioids were used for pain control.

Post-operative period was complicated by secondary haemorrhage. He was given intravenous antibiotics and had to be transfused with two units of packed cells. He recovered fully and was discharged home.

### III. DISCUSSION

The symptoms of giant BPE include LUTS and other compressive symptoms. These patients are also prone to renal impairment. They may have significant bleeding for which there are reports of prostatic artery embolization to achieve haemostasis.<sup>5</sup> our patient received blood after his surgery. Autologous blood transfusion is option to reduce cost, increase availability of blood and reduce the possibility of transmitting infections.<sup>6</sup>This could not be done for our patient because of his age. He rather had isovolumaemichaemodilution to reduce overall blood loss. Some elderly patients are multiple medications which may include anti-coagulants that may increase bleeding during surgical intervention.<sup>7</sup>Some of these medications have to be stopped before surgery however; our patient was not on anticoagulants.

Elderly patients are prone to cardiovascular complications like hypertension and myocardial infarctions.<sup>8</sup> Major surgical interventions like open or trans-urethral prostatectomy increase this risk of myocardial infarctions.<sup>8</sup> Elderly patients going for elective major surgeries should have preoperative cardiac evaluations like our patient who had an echo cardiography that was essentially normal with a ventricular ejection fraction of 85%.

Surgery is indicated in patients who have moderate to severe LUTS, recurrent spontaneous acute urine retention, recurrent urinary tract infections and haematuria of prostatic origin and etc.<sup>9</sup> The surgical options include transurethral resection of the prostate (TURP), holmium enucleation of the prostate (HOLEP), robotic,

laparoscopic and open surgery. TURP is the gold standard procedure especially bipolar TURP in which relatively large glands can be resected but in cases of gaint prostate and very elderly patients open surgery is favoured by some urologist.<sup>10</sup> Our patient had open surgery because of the size of his prostate and we don't have facilities available and HOLEP, laparoscopic and robotic suregeries is not readily available in the West African sub region.

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