Original Article

An Audit of TURP at DHQ Hospital Abbottabad

1. Muhammad Nawaz 2. Asif Saeed 3. Muhammad Khalid Bin Saleem 4. Nadia Asif 5. Khalid Asif

1. Assoc. Prof. of Surgery, WMC, Abbottabad 2. Asstt. Prof. of Surgery, WMC, Abbottabad 3. Asstt. Prof. of Ophthalmology, WMC, Abbottabad 4. Sr. Lecturer, WMC, Abbottabad 5. Anaesthetist, DHQ Hospital Abbottabad

ABSTRACT

Background: As the age advances benign prostatic hyperplasia occurs in almost all men. BPH produces symptoms mostly after 50years of age. Non surgical/ conservative management for bladder outflow obstruction mainly due to obstructive prostate includes selective alpha adrenergic blockers and alpha 1 reductase inhibitors. They have significant role but only in patients who have small prostate or who are waiting for surgery. However 30% of men eventually require surgery for BPH. Because of high risk of morbidity and mortality to elderly patients undergoing prostate surgery, the search for a procedure with minimal associated risks has continued. Therefore different procedures have been tried. Among surgical treatment for the disease, TURP has a definite edge over open procedures and has become a reference standard for prostate surgery.

Study Design: Retrospective study

Place and Duration of Study: This study was conducted at DHQ Hospital Abbottabad from 1998-2001.

Patients and Methods: Total 133 patients were treated during this period. Patients of all ages were included. The patients were divided into 04 age groups. Patients were investigated with physical examination, ultrasonography, ECG, Chest X-ray, Blood CP, Urea/creatinine. Standard procedure with 24 Fr. Resectoscope was used with cutting loop. Patients were followed up post operatively and complications noted.

Results: The common age group was 61-70 years (51%). Size of prostate gland was 60-80gms in (32%) cases. Bleeding was the most common complication (9%). Conversion to open was in 02 cases (1.5%). Myocardial infarction occurred in 04 cases which resulted in death of these patients postoperatively.

Conclusions: BPH produces symptoms mostly after 50years of age. Nearly 70% of 70 years old men have BPH. However 30% of men eventually require surgery for BPH. Among surgical treatment for the disease, TURP has a definite edge over open procedure. . It has very low complications in good hands. TURP has become a reference standard for prostate surgery.

Key words: Benign prostatic hyperplasia, TURP, bladder outflow obstruction

INTRODUCTION

Prostate is the largest accessory reproductive gland of male which has potential to grow with age. As the age advances, benign prostatic hyperplasia occurs in almost all men. BPH produces symptoms mostly after 50years of age. Nearly 70% of 70 years old men have BPH causing symptoms and hampering the quality of life in these patients. These patients are forced to seek medical treatment to improve quality of life. Non surgical or conservative management for bladder outflow obstruction mainly due to obstructive prostate includes selective alpha adrenergic blockers and alpha-1 reductase inhibitors. They have a significant role but only in patients who have small prostate or who are waiting for prostatic surgery. However 30% of men eventually require surgery for BPH. Because of high risk to elderly patients undergoing prostate surgery, the search for a procedure with minimal associated risks has continued. Therefore different procedures have been tried. Among surgical treatment for the disease, TURP has a definite edge over open procedures and has become a reference standard for prostate surgery. Bleeding, clot retention, incontinence of urine and retrograde ejaculation are major complications of TURP which are minimal in good hands. Patient's stay in the hospital is 1-2 days. Foley catheter is removed after 02 days. Transurethral bladder neck incision of prostate and Laser ablation of prostate is technically simple, relatively quick procedure and has low morbidity but is only effective in small prostate. The hospital stay is also considerably shortened. The results are however not very impressive. A relatively new technique transurethral needle ablation (TUNA) and Transurethral electrovaporization of prostate (TUEVP) have been noted to produce better symptomatic relief when compared with lasers. Transurethral microwave thermotherapy has been attempted but no convincing objective improvement seen in patients. Trans urethral balloon dilatation of prostate also has insignificant blood loss, shorter hospital stay and less risk of retrograde ejaculation. The results are not good in relatively larger glands when compared to TURP.

PATIENTS AND METHODS

Total 133 patients were treated during this period. Patients of all ages were included. The patients were divided into 04 age groups. Patients were investigated

with physical examination, ultrasonography, ECG, Chest X-ray, Blood CP, Serum Urea/creatinine and screening for Hepatitis B and Hepatitis C. Patients having IHD, bleeding disorder, hepatitis B and C positive and bladder stone were excluded from study. Most of the patients presented with acute urinary retention 76 (57%) while 57 patients (43%) were admitted through OPD with catheter in place who were waiting for surgery for quite some time. Standard procedure with 24 Fr. Resectoscope was used with cutting loop. Solution used was 5% dextrose for irrigation during surgery and 0.9% saline for post operative bladder irrigation. 3-way Foley catheter was passed post operatively with continous irrigation which was removed after 48 hours. Anaesthesaia administered was spinal in 128(96%) and GA in 05(04%) cases. Patients were followed up post operatively and early and late complications noted.

RESULTS

The common age group was 61-70 yrs. (51%). Size of the prostate was 60-80 gms in 42 patients (32%), while 05 patients (04%) had prostate of 100-120 gms. Direct inguinal hernia was the common associated finding in 38(28.5%) patients while senile cataract was present in 12(09%) patients. Post operative complications were Bleeding in 12 patients (09%), UTI (7.5%), incontinence (1.5%), recurrence of symptoms in (04%), chest infection in (03%). 04 patients had acute Myocardial Infarction post-operatively and died while 02 patients (1.5%) were converted to open transvesical prostatectomy. Most common complication was bleeding which occurred in 12(09%) cases. Post operative hospital stay was 02 days in 122(%) cases. While 04 patients had 4-6 days stay. Antibiotics were started pre-operatively and continued post. operatively for 07 days. UTI occurred due to surgery and also because the patients had indwelling catheter pre-operatively. 3-way Foley catheter was passed with irrigation which was removed after 48 hours in128 patients while in 05 patients it was retained for 04-06 days because of bleeding.

Table No.1: Age wise Distribution (n= 133)

Age in Yrs	No. of Patients	Percentage
50-60	15	11
61-70	68	51
71-80	32	24
81 and above	18	14

Table No.2: Size of Prostate Gland (n= 133)

Size of gland in gms	No. of patients	Percentage
30-40 gms	22	16.5
40-50gms	16	12
50-60gms	36	27
60-80gms	42	31.5
80-100gms	12	09
100-120gms	05	04

Table No.3: Presentation (n= 133)

Presentation	No. of patients	Percentage
Ac. Retention	76	57
OPD with Catheter	57	43

Table No.4: Complications (n= 133)

Complications	No. of patients	Percentage
UTI	10	7.5
Incontinence	02	1.5
M I & Death	04	03
Chest infection	04	03
Recurrence	05	04
Conversion to open	02	1.5
Bleeding	12	09

Table No.5: Anaesthesia (n= 133)

Anesthesia	No. of patients	Percentage
Spinal	128	96
GA	05	04

DISCUSSION

Benign prostatic hyperplasia occurs to almost all men mostly after 50years of age. Nearly 70% of 70 years old men have benign prostatic hyperplasia. Non surgical or conservative management for bladder outflow obstruction mainly due to obstructive prostate has significant role but only in patients who have small prostate. However 30% of men eventually require surgery for BPH. Among surgical treatment for the disease, TURP has a definite edge over open procedures and has become a reference standard for prostate surgery. As the patients undergoing prostate surgery are elderly, the search for a procedure with minimal associated risks has continued.TURP can be performed easily. It has very low complications in good hands. Bleeding and clot retention are major complications, which are minimal experienced hands. Bleeding and clot retention were most common complication in our study which was about 09%. We had to convert to open procedure in 02 cases because of excessive bleeding. Water intoxication also occurs with patients having larger prostate and longer operation time which did not occur in our study. Urinary incontinence is other complication which occurs due to damage to internal sphincter. This can be avoided by recognizing the verumantanum and keeping the resection away from it. We had 02 patients developing urinary incontinence. Patient's stay in hospital is for 1-2 days which reduces hospital expenses and there is less burden on patient's resources. The objective improvement of symptoms is also satisfactory. TURP avoids the stress of open surgery. TURP avoids wound infection and urinary fistula formation. Early mobilization of the patient is easy and avoids many complications. It is well tolerated by the patients. The procedure has been done satisfactory in patients with prostate up to 120 gms. Large prostate size needs open

surgery. Concurrent bladder stones can be removed by litholapaxy.

CONCLUSION

BPH produces symptoms mostly after 50years of age and 30% of men eventually require surgery for BPH. Among surgical treatment for the disease, TURP has a definite edge over open procedure. It has very low complications in good hands. Benefits of TURP are shorter hospital stay, shorter catheterization time and shorter recovery time. TURP has become a reference standard for prostate surgery.

REFERENCES

1. Diokno AC. Benign changes in the prostate with ageing. Br J Urol 1998 Dec: 82 Suppl 1: 44-6.
2. Oesterling JE. Benign prostatic hyperplasia. Its natural history, epidemiologic characteristics, and surgical treatment. Arch Fam Med 1992;1 (2): 257-66
3. Pfeiffer GM, Giacomarra M. Benign prostatic hyperplasia. A review of diagnostic and treatment options. Adv Nurse Pract 1999;7(4): 31-6: 7-8.
4. Isaacs JT. Epidemiology and natural history of benign prostatic hyperplasia. In prostate and Alpha- blockers. Amsterdam. Excerpta Medica 1998; 1: 10.
5. Berry SJ, Coffey DS, Walsh PC, Ewing LL. The development of human benign prostatic hyperplasia with age. J Urol 1984; 132 (3): 474-9.
6. Costello AJ, Bowsher WG, Bolton DM, Braslis KG, Burt J. Laser ablation of the prostate in patients with benign prostatic hyperplasia. Br J Urol 1992; 69: 603-8.
7. Kaplan SA, Laor E, Fatal M, Te AE. Transurethral resection of the prostate versus transurethral electrovaporization of the prostate: a blinded, prospective comparative study with 1 year follow-up. J Urol 1998; 159(2):454-8.
8. Wang ZL, Wang XF, Li B, Ji JT, Hou SC, Shao SX, et al. Comparative study of transurethral electrovaporization of prostate versus transurethral resection of prostate in benign prostatic hyperplasia.Zhonghua Nan Ke Xue 2002; 8(6): 428-30.
9. Virdi JS, Pandit A, Sriram R. transurethral needle ablation of the prostate: a prospective study with a 2 year follow up. J Urol 1997; 79: 60-7.
10. Orandi A. transurethral incision of prostate. J Urol 1973; 110: 229-39.
11. Fitzpatrick JM. Minimally invasive and endoscopic management of benign prostatic hyperplasia. Campbell-Walsh Urology. 9th ed. Philadelphia: Saunders Elsevier;2007.p.2803-2844.
12. Presti JC, et al. Benign prostatic hyperplasia (BPH) section of Neoplasms of the prostate gland. In: Tanagho EA, McAninch JW, editors. Smith's General Urology. 17th ed. New York: McGraw-Hill, 2008.p.348-355.
13. Roehrborn CG, et al.. The effects of dutasteride, tamsulosin and combination therapy on lower urinary tract symptoms in men with benign prostatic hyperplasia and prostatic enlargement: 2-year results from the Combat study. J Urol 2008; 179(2): 616-621.
14. Aho TF, Gilling PJ. Laser therapy for benign prostatic hyperplasia: A review of recent developments. Current Opinion in Urology, 2003;13(1): 39-44.
15. Soliman SA, et al. Rotoresection versus transurethral resection of the prostate: Short-term evaluation of a prospective randomized study. J Urol 007; 177(3): 1036-1039.
16. Thiel DD, et al. Electroresection and open surgery. Urologic Clinics of North America. 2009;36:461.
17. Smith RD, et al. Transurethral resection of the prostate. Current Opinion in Urology 2011;21:36.
18. Mebust WK, HoltgreweHL, Cockett ATK. Transurethral Prostatectomy; Immediate and Postoperative complications, J Urol 1989; 141; 243-247.

Address for Corresponding Author:
Dr. Asif Saeed
H. No. 113 Street No. 10
Jinnahabad Township, Abbottabad
Tel.092-992-380372
Cell. 0333-5037702
E-mail aasif_saeed@yahoo.co.uk