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POSTOPERATIVE OUTCOME OF BENIGN PROSTATIC HYPERPLASIA AND ITS CLINICAL PRESENTATION IN SURGICAL OPD

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Abstract:

Objective: *To know the different presentations of benign prostate hyperplasia (BPH) and its association to void postoperatively after transurethral resection of prostate (TURP).*

Study Design: *A Prospective Study.*

Place and Duration: *In the Urology Department, Services Hospital, Lahore for two-year duration from February 2015 to February 2017.*

Methods: *All patients with BPH were included in the study in which the primer presentation format was correctly determined and then TURP was performed. Four forms of presentation are described: (1) acute retention, (2) underlying urinary tract symptoms (LUTS), (3) acute on chronic urinary retention and (4) chronic. After these examinations all these patients were sent for TURP. The catheter was removed postoperatively, 48 hours after surgery, when the urine was clear. Patients with failed excretion were re-catheterized and a second trial was performed on the third day of catheterization without a catheter (TWOC).*

Findings: *345 total patients with BPH were selected for analysis. There were 75 (21.7%) patients with symptoms of urinary retention and lower urinary tract (LUTS) in these 270 patients (78.3%). Acute retention was found in 129 patients (37.4%), chronic retention in 81 patients (23.5%) and acute retention in 60 patients (17.4%). (I) acute retention was obviously greater (P <0.05) in acute retention than in acute retention (a) and chronic retention (I) in patients with acute retention. when compared to acute eclipse.*

Conclusion: *BPH patients are very late in our region, with most (78%) complications of urinary retention. The presentation of BPH has a great effect on its outcome postoperatively. Patients with chronic or acute chronic retention complications have less favorable outcome after TURP in terms of postoperative urination. In addition, prostate weight and patients age are not important factors in relation to postoperative void deficiency.*

Key Words: *Transurethral resection of the prostate, Benign prostatic hyperplasia, prostate.*

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INTRODUCTION:

Benign prostatic hyperplasia (BPH) signs and symptoms associated with it are quite common among older men, suggesting that aging is a natural synchronicity. This is especially true in our region, with less aging consciousness, with lower urinary tract symptoms (LUTS) being taken to be accepted as the last effects of old age in aging men. Economic constraints and Scarce health resources lead to more delay in treatment and presentation. More than 90% of patients in the western world with BPH are managed on severity of symptoms basis and anxiety regarding symptoms of the patient. In contrast, 71-82% of BPH patients in under developed countries receive medical treatment only when there are disease complications. Different long-term complications of untreated BPH include recurrent urinary tract infections, chronic and acute urinary retention, diverticula, dilatation of the upper urinary tract, and renal failure. Prolonged occlusion due to BPH causes certain changes in the neuromuscular tissues of the urine bag, which can cause excessive accumulation of collagen, collagen and postoperative consequences of this disease. Contractility impairment of Detrusor muscle has been noted in males with long-term BPH, and this effects surgery outcome and least satisfactory results. The aim of the analysis was to know the association of different presentation forms of BPH and after transurethral resection of the prostate, failure to void postoperatively.

MATERIALS AND METHODS:

This Prospective study was taken place in the Urology Department, Services Hospital, Lahore for two year duration from February 2015 to February 2017. With BPH all patients were included in which study was performed, the presentation of the prostate and the definitive primary mode of subsequent transurethral resection (TURP). Test results without catheter (TWOC) were recorded as well as in the age, weight and prostate tissues of the BPH patient in the resected mode were recorded. Four imaging modalities defined by BPH: acute urinary retention, symptoms to reduce chronic urinary tract symptoms (LUTS) and chronic retention. Routine ultrasonography was performed to determine the frequency of lower urinary tract symptoms (LUTS) and residual urinary void volume in these categorical patients, with a diagnosis of residual urine post void of 500 mL in the kidney and bladder. urinary retention according to Hamm and Speakman Definitions was the first presentation were based on urine volumes filtered with catheter. All patients complete medical history was obtained and according to (I-PSS) International Prostate Symptom Score proforma of questionnaire was completed in those with LUTS. On each patient Digital rectal examination (DRE) was performed. A bladder, prostate and kidney ultrasonography was performed for all patients and for those with LUTS for postural residual urine. In selected patients Intravenous urography and urethrography was done in the indicated patients. Because there was no uroflowmeter available, uroflurometry has not been performed in patients with LUTS. By three consulting urologists and a general surgeons with extensive experience in endoscopic urological procedures all patients were operated. The resected prostatic tissues were sent to the histopathology section to determine the total weight and histopathological findings of the tissues. Patients with prostate complicated diabetes mellitus, Ca, neurological deficit or associated urethral stricture were not included in the analysis. TURP was generally performed on the study list available to all patients with normal kidney function, but TURP was performed when creatinine was stabilized for those with high serum creatinine. Post-operative catheters were removed 48 hours after surgery, when the urine was clean. Non-canceling patients were re-hypothesized and on the third day of catheterization a second trial was performed without a catheter (TWOC). The elimination of spontaneous urine in the 1st or 2nd TWOC was determined as "successful TWOC". Postoperatively, all patients were interviewed physically and interviews were performed and an ultrasonographic examination of the successful TWOC residual urine was done at the end of the second week. Analysis of the data was done using a software "GraphPad Instat" version 4.2. Between the two groups comparison of the average of the quantitative variables was recorded by Student t-test (weight and age of resected prostate tissues).

RESULTS:

We included 345 patients with BPH who were referred to hospital and 270 patients 76 (22.07%) with lower urinary tract symptoms (LUTS) and (79.03%) with urinary retention. All LUTS patients showed severe symptoms in the lower urinary tract (I-PSS> 21). Acute retention in urinary tract infection patients were 130 (36.94%), 81 (23.5%) had chronic retention and acute on chronic retention were (18.04%). With acute retention, One patient was referred initially for TURP revision on the tenth day of the 1st TURP treatment. In this patient, the initial procedure was not completed at the beginning of opening of large venous sinuses and prostatic capsule perforation. However, this patient was successfully void 48 hours after TWOC after the 2nd TURP. For this reason, it was included in the "successful

TWOC" group for the purposes of the subsequent analysis. All patients with LUTS failed successfully after TURP. Seventeen of the 129 patients (5.4%) with acute retention could not cancel the catheterization of 10 (14.90%) of the 60 patients with acute chronic retention and 11 patients (13%) with chronic retention. The proportion of males who failed after TURP was greater significantly in patients with acute involvement compared with LUTS (P <0.05). Similarly, the proportion of uninvolved males after TURP was greater significantly (P <0.05) in patients with acute and chronic retentions than with chronic retention. The proportion of men who could not be withdrawn after TURP was significantly higher in those with any type of retention (P <0.005) when compared with those with any type of retention compared with those with LUTS (P <0.005). As shown in Table 1.

Table No1: Outcome related to mode of presentation

S. NO	Mode of presentation	Successfully voided after TWOC*	Failed to void after TWOC	P-value
1.	LUTS** Vs Acute retention	75 122	0 7	0.0487
2.	Acute retention Vs Chronic retention	122 70	7 11	0.0461
3.	Acute retention Vs Acute on Chronic retention	122 51	7 9	0.0458
4.	Any type of retention Vs LUTS	243 75	27 0	0.0013

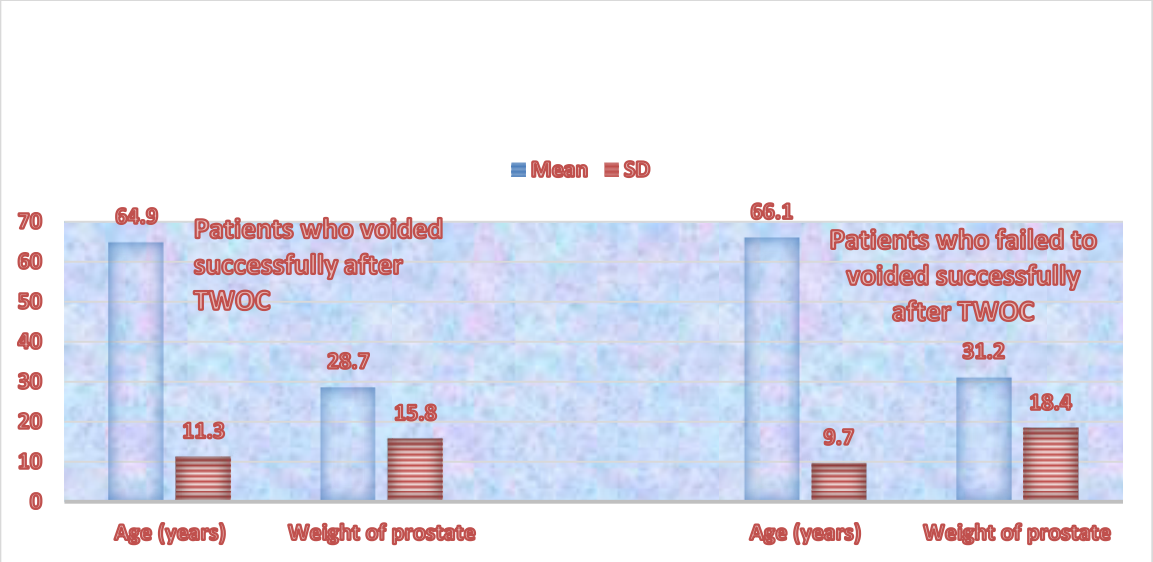
*Trial Without Catheter
**Lower Urinary Tract Symotoms

The average age of unsuccessful patients was 65.01 ± 9.12 years, and the mean age was 65.94 ± 9.06 years. Later, between the two groups the age difference was not significant statistically (P> 0.05)as shown in Table 2, there was no major variation in the weight of prostate tissues taken from the failed group (mean 28.6 ± 15.8 grams) compared to the failed group (mean 31.2 ± 18.4 grams) (P> 0.05).

Table No2: Outcome related to age and weight of prostate (resected)

S.No	Patients who voided successfully after TWOC* (n=138)	Patients who failed to void after TWOC (n=27)	P-value
1.	Age (years) mean ± SD 64.9 11.3	Age (years) mean ± SD 66.1 9.7	0.5929
2.	Weight of prostate (grams) Mean ± SD 28.7 15.8	Weight of prostate (grams) Mean ± SD 31.2 18.4	0.4366

*Trial Without Catheter



DISCUSSION:

90% of patients with BPH in the western world are treated according to symptom severity, BPH complications occurs in most of our patients. Above 79% of patients had chronic or acute urinary retention in chronic retention and acute retention. Only 22.8% of the patients had symptoms of LUTS and severe symptoms noted in all patients (I-PSS> 21). These results are opposite to the results in the developed world, but 70-80% of BPH patients have a good correlation with developing countries, where they only receive medical advice when there are complications of the disease. Acute and chronic urinary retention is a complication of long-term treatment with BPH that affects / affects the disease postoperative outcome. In our analysis, with chronic retention13.6% of patients, 5.5% of patients with acute retention and with acute or chronic retention15.0% of patients were excluded after catheter removal. . Therefore, patients with chronic retention and chronic acute retinopathy (P <0.05) had significantly more failure after insufficient intervention (TWOC) compared to acute retention. A large number of patients at any retention (P <0.005) did not cancel according to those with LUTS after TWUT. Our findings are well-correlated with those described by Reynard and Shearer, and can be explained by changes in the neuromuscular tissue of the bladder caused by long-term obstruction associated with BPH. The results of our study suggest that BPH has a great influence on the presentation and postoperative outcomes of this disease. Patients with symptoms have less favorable outcomes in patients with complications such as chronic retention and chronic acute retention, after urinary catheter removal. In addition, the results suggest that the age of the patient and prostate weight are not important factors in terms of postoperative vacuum deficiency.

CONCLUSION:

Our study results suggest that patients with BPH present in our region are too late, many of them (78%) have complications of urinary retention.

REFERENCES:

1. Lin, Yu-Hsiang, Chen-Pang Hou, Tien-Hsing Chen, Horng-Heng Juang, Phei-Lang Chang, Pei-Shan Yang, Chien-lun Chen, and Ke-Hung Tsui. "Transurethral resection of the prostate provides more favorable clinical outcomes compared with conservative medical treatment in patients with urinary retention caused by benign prostatic obstruction." *BMC geriatrics* 18, no. 1 (2018): 15.
2. Shanhua, M., J. Ying, Y. Qiuping, Z. Lujia, and W. Lujia. "A Modified Technique for Performing Transurethral Nephroscopy Lithotripsy of Bladder Stones with/without Plasma Kinetic Resection of the Prostate of Benign Prostatic Hyperplasia: A New Bladder Stone Operation Method. Androl Gynecol: Curr Res 6: 1." *of* 3 (2018): 2-3.
3. Chen, H., M. P. Huang, and T. Huang. "Open Prostatectomy vs. Laparoscopic Prostatectomy for Benign Prostatic Hyperplasia with Large Volume Prostate: A Meta-analysis." *Med-Clin Res & Rev* 2, no. 1 (2018): 1-4.
4. Li, Ke, Dejuan Wang, Cheng Hu, Yunhua Mao, Maoyin Li, Jie Si-Tu, Wentao Huang, Wenhan Qiu, and Jianguang Qiu. "A Novel Modification

of Transurethral Enucleation and Resection of the Prostate in Patients With Prostate Glands Larger than 80 mL: Surgical Procedures and Clinical Outcomes." *Urology*113 (2018): 153-159.

5. McLarty, R., Assmus, M. A., Dawe, P., & Abdulrehman, Y. (2018). Prospective Evaluation of Postoperative Urinary Retention in Endovascular Aneurysm Repair Patients: An Interim Analysis of a Novel Vascular Quality Initiative Project. *Journal of Vascular Surgery*, *68*(3), e88.
6. Sarier, Mehmet, Ibrahim Duman, Suleyman Kilic, Yucel Yuksel, Meltem Demir, Mesut Aslan, Levent Yucetin, Sabri Tekin, Asuman Havva Yavuz, and Mestan Emek. "Comparative Results of Transurethral Incision with Transurethral Resection of The Prostate in Renal Transplant Recipients with Benign Prostate Hyperplasia." *Urology journal*15, no. 4 (2018): 209-2013.
7. Chaudhary, Rahul, Desh Diwakar Mittal, and Shankar Prasad Sinha. "A COMPARATIVE STUDY OF COMPLICATIONS AND OUTCOMES OF OPEN PROSTATECTOMY (OP) VERSUS TRANS URETHRAL RESECTION OF PROSTATE (TURP)." *INDIAN JOURNAL OF APPLIED RESEARCH* 7, no. 12 (2018).
8. Pirola, Giacomo Maria, Giovanni Saredi, Ricardo Codas Duarte, Lorraine Bernard, Andrea Pacchetti, Lorenzo Berti, Eugenio Martorana, Giulio Carcano, Lionel Badet, and Hakim Fassi-Fehri. "Holmium laser versus thulium laser enucleation of the prostate: a matched-pair analysis from two centers." *Therapeutic Advances in Urology* (2018): 1756287218779784.
9. Kim, Myong, Chang Wook Jeong, and Seung-June Oh. "Effect of urodynamic preoperative detrusor overactivity on the outcomes of transurethral surgery in patients with male bladder outlet obstruction: a systematic review and meta-analysis." *World journal of urology* (2018): 1-10.
10. Enikeev, Dmitry, Petr Glybochko, Zhamshid Okhunov, Yuriy Alyaev, Leonid Rapoport, Dmitry Tsarichenko, Mikhail Enikeev, Nikolay Sorokin, Alim Dymov, and Mark Taratkin. "Retrospective Analysis of Short-Term Outcomes After Monopolar Versus Laser Endoscopic Enucleation of the Prostate: A Single Center Experience." *Journal of endourology*32, no. 5 (2018): 417-423.
11. Scott, A.J., Mason, S.E., Langdon, A.J., Patel, B., Mayer, E., Moorthy, K. and Purkayastha, S., 2018. Prospective Risk Factor Analysis for the Development of Post-operative Urinary Retention Following Ambulatory General Surgery. *World Journal of Surgery*, pp.1-6.
12. Sun, Qian, Wenhuan Guo, Di Cui, Xiaohai Wang, Yuan Ruan, Fujun Zhao, Shujie Xia, Bangmin Han, and Yifeng Jing. "Thulium laser enucleation versus thulium laser resection of the prostate for prevention of bladder neck contracture in a small prostate: a prospective randomized trial." *World journal of urology* (2018): 1-7.
13. Sarıer, Mehmet, İbrahim Duman, Meltem Demir, Yücel Yüksel, Mestan Emek, and Erdal Kukul. "The outcomes of transurethral incision/resection of the prostate (TUIP/TURP) performed early after renal transplantation." *Turkish journal of urology* 44, no. 2 (2018): 172.
14. Miernik, A. and Schoeb, D.S., 2018. "Three horse shoe-like incision" holmium laser enucleation of the prostate: first experience with a novel en bloc technique for anatomic transurethral prostatectomy. *World journal of urology*, pp.1-6.
15. Gu, Meng, Chong Liu, Yan-bo Chen, Huan Xu, Shi Fu, Qi Chen, and Zhong Wang. "Comparison of Vela and holmium laser enucleation of the prostate: a retrospective clinical trial with a 12-month follow-up." *International urology and nephrology* (2018): 1-5.