EDITORIAL

Non-Operative Management of Benign Hyperplasia of Prostate

Suresh Saraf MS, Mch

Benign prostatic hyperplasia describes a benign neoplasm of the prostate that develops in aging men. The effects of the enlargement produce a symptom complex reffered to as LUTS (lower urinary tract symptoms) which can be produced by so many disorders causing infravesical obstruction. The symptoms can be related to storage (frequency, urgency and incontinence) or to voiding (hesitancy, sensation of incomplete bladder emptying, terminal dribbling and straining to initiate micturation). The poineering works of Caine and Lepor (1,2) have lead us to better understanding of prostatic anatomy and its receptors. Initial reaction to the non-operative management of BPH by urologists has been of skepticism and complacency. It is difficult to imagine that any treatment will be as effective as complete resection or ennucleation of prostatic adenoma. The challenge of the future for us is to stratify patients with symptomatic BPH so that effective treatment is offered with the least associated morbidity.

The treatment of symptomatic BPH is mainly aimed at relieving infravesical obstruction. Caine proposed that bladder outlet obstraction due to BPH has a static and a dynamic component. The static component is the fixed amount of prostatic glandular tissue while as the dynamic component is related to the tone of the bladder neck and the prostatic smooth muscle.The medical community is since engaged in working out modalities of treating these components of prostratic obstruction. Medical therpy for BPH has been supported by the limitations of prostatectomy that include morbidity of the surgical procedure, failure to consistently achieve a successful outcome, necessity for retreatment & suggestions that prostatectomy increases the risk of delayed life threatning complications (3).

α–adrenergic blockade has been the main stay of manipulating the dynamic component of prostatic obstruction. α-1 adrenoceptors are mainly found in the bladder neck and prostate. They are further subtyped into α1A, α1B and α1D. 70% of adrenoceptors in human prostate are of α1A subtract. Caine was the first to use adrenergic blockade in 1975 when he used phenoxybenzamine in treating eight patients of urinary retention (4). Prazosin was the next drug used as phenoxybenzamine had unexceptable side effects. It is a selective α1 adrenergic blocking agent & in one study it increased PFR to 13ml/sec. from 8ml/sec in treated group and there was no change in the placebo group (5).Terazosin is the next extensively used α1 blocker for BPH. It can be given in a dosage of 1 to 10mg/day and the terazosin treated patients exhibit a significantly greater mean decrease in obstructive scores compare to the placebo group (6).The other selective blockers like doxazosin and alfuzosin have

From the Postgraduate Department of General Surgery, Government Medical College, Jammu (J&K), India.
Correspondence to : Dr. Suresh Saraf, Consultant Urology, Government Medical College, Jammu (J&K), India.

also shown to significantly improve the prostatic symptom score & increase the flow rates. The latest arrival in the market is tamsulosim which has a greater affinity for α1A adrenoceptors. It also inhibts α1D receptors which inhibit detrusor muscle irritability & improve storage symptoms. Given in a daily dosage of 0.2 to 0.8mg, it has almost negligible side effects and there is no first dose effect or orthostatic hypotension (7).

Androgen supression is another modality to alter the static component of prostatic obstruction. Finasteride which is a 5a reductace inhibitor is the commonly used drug. Long term use over a period of six months to one year have resulted in dramatic decrease in prostatic volume and improvement in prostatic symptom score (8). Combinations of finasteride and a blockers have been used with good results (9).

Phytotherapy using various plant extracts have gained widespread use since 1990. Commonly used agents are Sawpalmetto berry, South African star grass, Rye pollen & pumpkin seeds. The mechanism of action probably is anti-inflammatory, 5a reductase inhibition or alteration of growth factors.

In the end it is emphasized that over last three decades, we are having a better understanding of a disease complex producing LUTS. Significant advancement have been made in managing these disorders medically or with minimal intervention. As urologists, we are supposed to provide the best possible treatment with minimal morbidity to the patient and in that direction we have to individualize treatment from person to person keeping in mind his requirments and expectations.

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