



Surgery

NOCTURIA IN BPH – EFFICACY AND SAFETY OF SILODOSIN

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ABSTRACT Nocturia is one of the most bothersome of all benign prostatic hyperplasia (BPH) symptoms. **OBJECTIVE:** To evaluate the efficacy and safety of Silodosin on nocturia in BPH patients. **MATERIALS AND METHODS:** This is a prospective study that included men 50 years or older with BPH and nocturia (>2 events/night) based on voiding diary, International Prostate Symptom Score (IPSS) ≥ 8 and quality of life score ≥ 3 . Patients included received 8 mg of Silodosin once daily for 12 weeks. We evaluated changes in the mean number of nocturia from baseline to the end of 12 weeks based on voiding diary and also assessed the rate of adverse drug effects. **RESULTS:** 60 patients were included in the study. The number of nocturia episodes decreased significantly after 12 weeks of treatment. Silodosin was found to be safe and effective in the treatment of nocturia in patients with BPH.

KEYWORDS : BPH, Nocturia, Silodosin

INTRODUCTION

Nocturia is one of the most bothersome of the LUTS in benign prostatic hyperplasia and relates to patient Quality of life. The International Continence Society (ICS) defines nocturia as voiding that occurs during the hours of sleep (i.e., voiding that is preceded and followed by sleep). Several studies have shown that nocturia is a symptom that only mildly benefits from treatment for benign prostatic hyperplasia. Medical therapy is the first-line treatment for LUTS associated with BPH. Mainstays in the treatment of male LUTS and clinical BPH are the α_1 -adrenergic receptor antagonists. Silodosin is an α_{1A} -adrenergic receptor antagonist that is selective for the α_{1A} -adrenergic receptor.

OBJECTIVE

To evaluate the efficacy and safety of Silodosin on nocturia in patients with Benign Prostatic Hyperplasia.

MATERIALS AND METHODS

Prospective single arm study conducted in Institute of Urology, Madras Medical College.

• Inclusion criteria

1. men 50 years or older with BPH
2. nocturia (>2 events/night) based on voiding diary
3. International Prostate Symptom Score (IPSS) ≥ 8
4. quality of life score ≥ 3

• Exclusion criteria

1. Patients who are candidates for surgical management for BPH.
2. Patients with other causes of nocturia such as global polyuria such as Diabetes insipidus, polydipsia, congestive cardiac failure, pts on diuretics.
3. PSA > 4 ng/ml
4. History of prostate cancer
5. Neurogenic Bladder
6. Postural hypotension
7. Severe renal, hepatic dysfunction and cardiac disease

60 patients were included - received 8 mg of Silodosin once daily for 12 weeks. We evaluated changes in the mean number of nocturia from baseline to the end of 12 weeks based on voiding diary and also assessed the rate of adverse drug effects. Secondary parameters - IPSS and QOL score assessed at baseline and after 12 weeks

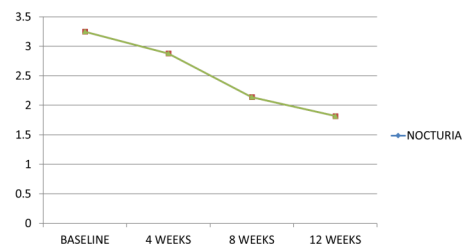
RESULTS

- Mean age – 64 years
- Mean no. of nocturia episodes at baseline – 3.25 ± 1.22
- Mean no. of nocturia episodes after 12 weeks – 1.82 ± 0.6 (p value – 0.024)

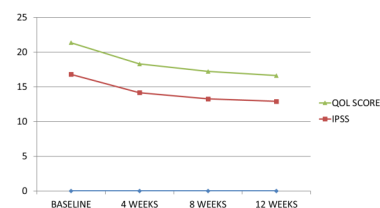
TABLE 1: EFFECT OF SILODOSIN ON IPSS

	SYMPTOMS	BASELINE	AT 12 WEEKS	P VALUE
IPSS	TOTAL	16.8 \pm 6.98	12.9 \pm 7.93	0.036
	STORAGE SYMPTOMS	6.73 \pm 3.52	6.09 \pm 4.13	0.266
	VOIDING SYMPTOMS	7.64 \pm 4.06	5.18 \pm 3.46	0.056
	SENSATION OF INCOMPLETE EMPTYING	2.27 \pm 1.49	1.82 \pm 1.72	0.088
	WEAK STREAM	3.27 \pm 1.68	2.55 \pm 1.86	0.052
	STRAINING	2.00 \pm 0.69	0.82 \pm 1.40	0.039
	INTERMITTENCY	2.55 \pm 2.25	1.64 \pm 1.36	0.083
	URGENCY	1.18 \pm 1.40	1.55 \pm 2.11	0.735
	FREQUENCY	2.45 \pm 1.92	1.67 \pm 0.50	0.225
	NOCTURIA	3.25 \pm 1.22	1.82 \pm 0.6	0.024
QOL SCORE	4.55 \pm 0.93	3.72 \pm 1.40	0.048	

GRAPH 1: EFFECT OF SILODOSIN ON NOCTURIA



GRAPH 2: EFFECT OF SILODOSIN ON IPSS AND QUALITY OF LIFE SCORE



Adverse effects – 15%

- Retrograde ejaculation – 12.8%
- Dizziness – 4%

GRAPH 3: ADVERSE EFFECTS OF SILODOSIN

ADVERSE EFFECTS 15%



LIMITATIONS

- Not a placebo controlled randomised study
- Only subjective assessment and not an objective assessment

CONCLUSION

Silodosin was found to be safe and effective in the treatment of nocturia in patients with BPH.

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