139

Authors: Tracy W. Cannon, Margie O'Leary, Janet R. Erickson, Christopher P. Smith, Steve Y.

Chung, JiYoul Lee, Michael B. Chancellor

University of Pittsburgh Medical Center Institution:

Title: CLINICAL OUTCOME AND TOLERABILITY OF CONTROLLED RELEASE OXYBUTYNIN

ON THE CATHETERIZATION OR VOIDING FREQUENCY IN MULTIPLE SCLEROSIS (MS)

PATIENTS WITH NEUROGENIC BLADDER.

Aims of Study:

Anticholinergic medications are the most popular drug of choice for treating MS patients experiencing

symptoms of detrusor hyperreflexia. This study was designed to use post void residual (PVR) via

ultrasound, urinalysis, culture and sensitivity testing when indicated, as well as voiding histories as

indicators for effectiveness of symptomatic treatment.

**Methods:** 

Forty men and women with a diagnosis of MS and complaints indicating neurogenic bladder were enrolled

in a single center prospective controlled study. After seven days washout period, patients recorded

episodes of voiding or catheterization and incontinence for three consecutive days. Other entry criteria

included a PVR of < 200 ml, urinalysis with the absence of significant bacteria or WBC's. These tests were

repeated at 6 and 12 weeks. Patients received initial doses of 10 mg controlled release oxybutynin in the

first week. Doses were escalated by 5 mg in weekly intervals to a maximum of 30 mg.

Results:

The mean age of the study patients was 43.3 ± 6.9 years with 80% women. Subjects reported clinical

improvement with decreased urinary frequency and incontinence episodes when dosing was escalated to

15 or 20 mg. There was a decrease of 2 voids or catheterizations per day seen within one week. No patient

experienced significant adverse effects during the course of the 12- week study and there were no

dropouts. Side effects experienced included mild to moderate dry mouth and dizziness. There was no

significant increase in the residual urine volume [pre 45±50 to post59±60 ml]. More than 80% of patient

required a final dose of oxybutynin controlled release greater than 10 mg with 20% needing 30 mg/day.

**Conclusions:** 

Controlled release oxybutynin is safe and effective in MS patients with neurogenic bladder. The onset of

clinical efficacy occurs within one week. Daily doses of up to 30 mg in select patients are well tolerated.

Support: ALZA Corporation