Role of Injection of 100 Units of Botulinum Toxin-A in Management of Refractory Idiopathic Overactive Bladder

Introduction and Objective: Overactive bladder (OAB) is a bothersome condition affecting the quality of life, financial constraint on the individual, and community. Anticholinergic drugs cannot be used long-term due to adverse side effects. Botulinum toxin has recently shown promising and encouraging result in management of OAB, however Botulinum toxin injection is still not in common use due to the financial load on the patient. The aim was to study the safety, efficacy, tolerability, and duration of effect of 100 units only of Botulinum toxin in refractory idiopathic detrusor overactivity.

Materials and Methods: Thirty-nine female patients (average age of 52 years) clinically and urodynamically diagnosed as idiopathic OAB were injected 100 units of Botulinum toxin-A mixed with 20 ml of normal saline, intradetrusally at the rate of 1 mL at each site for 20 such sites sparing the trigone and ureteric orifices. Follow up at 3rd, 6th, 9th, and 12th month with clinical and urodynamical questionnaire was done.

Results: There were 4 dropouts and 35 patients were evaluated, of which 30 patients (85.7%) showed improvement in clinical features like frequency, urgency, nocturia, and incontinence within 1 week of injection, which lasted for mean period of 7 months (varying from 6 to 9 months). Volume at first desire to void improved from median baseline of 104-204 ml and maximum cystometric capacity of bladder increased from mean baseline value of 205-330 ml. The detrusor pressure decreased by 49% from the baseline and postresidual urine volume increased by 30% of maximum cystometric capacity of bladder. There was no adverse effect on our patient.

Conclusions: Intradetrusor injection of 100 units of Botox-A in management of refractory overactive idiopathic bladder is not only safe and well tolerated, but also very effective with practically no side effects however, shorter period of improvement were observed.