69 Association of antimuscarinics and type A botulinum toxin for the treatment of the neurogenic bladder patient

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Introduction & Objectives: Botulinum toxin is already well established as a second line therapy for the overactive detrusor, despite several drawbacks, which include an increased cost and the potential for more severe complications compared to antimuscarinics. Our study aims to investigate whether giving antimuscarinics after the toxin injection might increase the interval between intravesical treatments.

Materials & Methods: A series of 30 consecutive adult patients were included in this prospective trial. All patients had neurogenic detrusor overactivity and were treated with intradetrusor injection of botulinum toxin type A. After one month in which the toxin proved effective, a daily dose of solifenacin 10 mg was added. The patients were evaluated every three months using the OABq (33 questions) and PVR measurement. Reinjection was decided based on the same criteria and values as the initial treatment. Urodynamics was performed before retreatment. Data was compared to a similar series of patients from our own experience. The parameters we monitored include time between injections, PVR values, OABqscore, Pdet and sensations reported by the patient. A t-test statistical analysis was done.

Results: The follow up period is 24 months in this series. Six patients (20%) did not require reinjection, compared with only two patients in the reference group. The time between treatments increased by 6 ± 2.44 months ($p < 0.0001$). The PVR did not show any statistical significant variation, and the same was observed for the Pdet values. Detrusor overactivity was observed in all patients requiring retreatment. The OABq showed progressive degrading, with sensations worsening slower than other parameters.

Conclusions: The association between these two drug classes led to a statistically significant increase in the time between retreatments. Botulinum toxin made solifenacin effective in those cases where it didn’t show enough efficacy when used alone. Antimuscarinics apparently decreased the sensation, and that might be the main reason behind longer efficacy. Even when combined with botulinum toxin, antimuscarinics did not cause acute urinary retention. The increased cost of treatment might be balanced by the longer period of efficacy.