

INTRADETRUSOR INJECTIONS OF ONABOTULINUM TOXIN A (BOTOX®) 300 U OR 200 U VERSUS ABOBOTULINUM TOXIN A (DYSPORT®) 750 U IN THE MANAGEMENT OF NEUROGENIC DETRUSOR OVERACTIVITY : A CASE CONTROL STUDY

Hypothesis / aims of study

To compare the outcomes of the first intradetrusor injections of abobotulinum toxin 750 U and onabotulinum toxin 200 U and 300 U in patients with neurogenic detrusor overactivity (NDO).

Study design, materials and methods

A retrospective case-control study was conducted including 211 NDO patients treated in three consecutive eras with onabotulinum toxin 300 U (2004-2006 ; 80 patients), abobotulinum toxin 750 U (2007-2011 ; 78 patients) or onabotulinum toxin 200 U (2011-2014 ; 53 patients). Urodynamic and clinical parameters were compared between groups. The primary endpoint was the rates of success defined as the combination of urgency, urinary incontinence and detrusor overactivity resolution.

Results

When comparing abobotulinum toxin to onabotulinum toxin any doses (200 U or 300 U ; n=133), success rates were similar (65.4% vs. 55.6% ; p=0.16). Patients treated with abobotulinum toxin 750 U had higher success rate (65.4% vs. 41.5% ; p=0.007) compared to those who received onabotulinum toxin 200 U. In contrast, there were similar success rates in abobotulinum toxin 750 U and onabotulinum toxin 300 U groups (65.4% vs. 65% ; p=0.91) but with a trend towards longer interval between the first and the second injection in the onabotulinum toxin 300 U group (12.4 vs. 9.3 months ; p=0.09).

Interpretation of results

The dose equivalence ratio of abobotulinum toxin over onabotulinum toxin for NDO could be 2.5:1.

Concluding message

Intradetrusor injections of abobotulinum toxin 750 U for NDO provided better outcomes than injections of onabotulinum toxin 200 U. Success rates of abobotulinum toxin 750 U and onabotulinum toxin 300 U were similar but interval between injections tended to be longer with onabotulinum toxin 300 U.

Disclosures

Funding: none **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** local ethics committee **Helsinki:** Yes **Informed Consent:** Yes