Assessment of sexual function and orgasmic capacity of women with spinal cord injury

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Following our previous studies on men, we have adapted our clinical protocol to assess the remaining sexual function of women with spinal cord injury (SCI). Our protocol involves an assessment of perineal sensitivity to help women acquiring a new mental image of their genitals, followed by an assessment of their sexual responses to natural stimulation, or vibrostimulation or vibrostimulation combined with midodrine (5–20mg). The results show that perineal assessment helps 85% of the patients and that 79% can reach orgasm with various forms of stimulation. Blood pressure changes during stimulation to orgasm showed that systolic blood pressure varied from 91 mmHg at baseline to 145 mmHg at orgasm to 103 mmHg at the end of the test. Diastolic blood pressure varied from 49 mmHg at baseline to 82 mmHg at orgasm to 68 mmHg at the end of the test, and heart rate from 68bat/min to 75bat/min to 72bat/min. The sensations described included 6.4 cardiovascular responses perceived at orgasm compared with 2.6 during sexual stimulation without orgasm, 11.4 muscular contractions perceived at orgasm compared with 7 without orgasm, 10 autonomic responses perceived at orgasm compared with 2.6 without orgasm and 1.4 dysreflexic responses perceived at orgasm compared with 0.6 without orgasm. The data are similar to those from men with SCI and validate the neurophysiological model of sexual function in patients with SCI (Funded by GENULF).

Goals/Objectives. – Evaluate the clinical and urodynamic effectiveness of 200 IU versus 300 IU intradetrusor injections of BOTOX.

Patients and methods. – Our prospective study involved 40 SCI patients between 2008–2010, with detrusor overactivity refractory to anticholinergics, achieving clean intermittent catheterization (ASU/HBS). Before injection, all patients had a clinical assessment: ability functional bladder (AFB), leakage between the catheterization and urodynamics evaluation: Maximum capacity bladder (BCMax) and amplitudes of involuntary detrusor contractions (IDC). The evaluation was done after 6 weeks. The injections were made with 200 IU Botox diluted in 30 mL in 30 points.

Results. – Our population was predominantly male (28 men and 12 women). 87.5% are continent for 9 months on average. Two groups of BMI:

Group 1 (G1): 21 SCI were injected with 200 IU Botox. 18 (85.71%) were continent for 9.3 months on average. The AFB increased (286–595 mL). The BCMax increased (536–480 mL). The amplitudes of the IDC all decreased with 11 SCI (52.38%) with zero IDC.

The re-injection of 200 IU Botox (1 to 3) in 11 patients confirmed the duration of efficacy.

Group 2 (G2): 19 SCI had Botox injections 300 IU (1–6) then Botox 200 IU (1–3). 17 patients (89.47%) were continent with 300 IU and 200 IU respectively for 8.8 months and 9.3 months. Re-injection of 300 IU and 200 IU respectively in 10 and 12 SCI confirmed the holdover. The increase in AFB and BCMax was identical for the 2 doses and the lower amplitudes of IDC.

Discussion/conclusion. – The multicenter randomized placebo controlled trial of Botox injection 200 or 300 IU conducted in neurological patients achieved an identical efficiency for two doses of Botox. Our prospective study showed efficacy, duration of action identical for 200 IU or 300 IU Botox and a reproducibility of clinical and urodynamic results.

References


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Ejaculation with penile vibratory stimulation: 202 spinal cord injury patients

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Keywords: Penile vibratory stimulation; Spinal cord injury; Ejaculation

Introduction. – The aim of our prospective study was to evaluate the prevalence of ejaculation in SCI patients by penile vibratory stimulation, depending on level of injury, the Asia score, pharmacological treatment, voiding mode and disease duration since injury.

Patients and methods. – Our study focused on 202 SCI patients hospitalized from January 2007 to 2009 all with anejaculation. All patients underwent a neurological evaluation, an Asia score, a collection of pharmacological treatments associated with their voiding mode. They all had one or more vibratory sessions with sperm collection and systematic search of sperm in the urine.

Results. – 202 hospitalized SCI patients: 87 cervical lesions, 87 thoracic lesions and 28 lumbar-sacral lesions. 158 have an Asia score A, 28 a peripheral perineum operation. 125 are making intermittent catheterizations. 99 patients treated with anti-cholinergic and 70 with alpha-blocker treatment. 88 patients had at least 48 months of evolution since trauma and 114 over 60 months (60 to 240 months). 78 patients or 39% achieved an ejaculation by penile vibratory stimulation (31 anterograde, 53 anterograde and retrograde, 17% retrograde). The prevalence of ejaculation triggered by penile vibratory stimulation was better for high spinal cord damage (47% cervical, thoracic 35%, 25% lumbo-sacral). The results were better for patients with incomplete versus complete lesion (52% versus 35%) and for patients who urinated by percussion versus self-catheterization (50% vs. 33%) (S). The disease duration did not influence ejaculation (NS).

Discussion and conclusion. – Penile vibratory stimulation improves the possibilities of ejaculation for SCI patients. Our results are dependent on the level of the injury, the nature of complete or incomplete lesion, independent of disease duration since trauma, although in the literature, these notions are controversial. Treatments associated with voiding mode seem to play a significant role in ejaculation.

References


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Sexual disorders in 83 patients with systemic sclerosis

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