

IMPROVEMENT OF QUALITY OF LIFE IN PATIENTS AFTER RADIATION THERAPY TREATED WITH BOTULINUMTOXININJECTION FOR NEUROGENIC BLADDER DYSFUNCTION

Hypothesis / aims of study

Intradetrusor injections of Botulinum toxin A (BTX) are emerging as the preferred treatment in patients with neurogenic bladder dysfunction. Several studies showed that its pharmacological effects significantly reduce detrusor muscle overactivity. Symptoms like painful micturition, urgency, frequency and nocturia develop in up to 30 % of patients after radiotherapy. The overactive bladder symptoms are known to reduce the quality of life. Botulinumtoxininjection decreased these symptoms.

Study design, materials and methods

Between 2008 and 2011 we treated patients (n=13, mean age 73), which received radiotherapy with BTX. Preoperatively, patients underwent clinical assessment (including voiding diary), urodynamics, cystoscopy and vaginal inspection. 8 patients received 200 IU/20 sites, 5 received 300IU/30 sites BTX. BTX was applied to the detrusor wall, the bladder trigone including. The operation was performed general anaesthesia. Postoperatively outcome measurements were conducted similar to preoperative procedures again including urodynamics. To evaluate the quality of life we used the International Consultation and Incontinence Questionnaire (ICIQ) Short form

Results

The quality of life increase in 67% of the patients. The maximum bladder capacity increased from 208ml to 286ml on average. Flow raised from 5,9 ml/s to 21 ml/s on average. After the treatment, all patients were able to void spontaneously. Post void residual bladder volume was 34ml on average (0-35ml). No significant urinary retention was reported. No systemic side effects were obvious during treatment. The catheter would removed after 24 hours. We could show the decrease of micturition frequency (day 10x vs 4x, nocturia 4x vs 2x) as well as the decrease of the pad (3x vs 1x). 4 patients underwent repeated in injections. Time period between the first and second injection was 10 months.

Interpretation of results

Our data show the effectiveness and safety of BTX treatment in patients after radiotherapy. All patients were able to void voluntarily after the injection. In contrast to the common apprehension analogue to most other neurogenic bladder dysfunctions, the risk of urinary retention or a rising post volume residual seems to be minor.

Concluding message

Botulinumtoxininjection decrease bladder symptoms, are well tolerated and increase the quality of life in patients after radiotherapy

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	none
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes