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potential role for the endogenous peptide, and the possibility that a selective NMB antagonist may have therapeutic activity in conditions where bladder capacity is inappropriately low.

References:

1. Neurally mediated hyperactive voiding in spontaneously hypertensive rats. *Brain Research*. 790:151-9, 1998.
2. Bombesin/GRP-Preferring and neuromedin B-preferring receptors in the rat urogenital system. *Neuropeptides* 24: 43-52, 1993.

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Title (type in CAPITAL LETTERS, leave one blank line before the text):

THE INFLUENCE OF INTRATHECAL BACLOFEN ON DETRUSOR FUNCTION – A URODYNAMIC STUDY

Aims of Study: The effect of Baclofen (B.) on the striated muscle is well known, however, its effect on the detrusor resp. its clinical relevance, especially when administered intrathecally, is still under discussion. Urodynamic studies were undertaken before and after the implantation of a B.pump to objectify the influence of B. on the detrusor.

Methods: between IV/99 und XII/99 a B.pump was implanted in 6 pat.s, 23-40 yrs., mean age 25 yrs., because of severe cerebral spasticity. Preoperatively (I), between 24 and 48 hours postop. (II) and at least 10 days postop., after achieving the therapeutic drug release dosage (III), urodynamics, according to ICS-criteria, were performed: the volume at the first hyperreflexic contraction, the max. bladder capacity, the max. detrusor pressure and the residual urine were evaluated.

Results:

Volume at first contraction: (I) 143.6 cc, (II) 248.3 cc, (III) 486.2 cc, the differences between I and III, $p < 0.001$, and between I and II, $p < 0.05$, stat.significant

Max.cystometric bladder capacity: (I) 169.4 cc, (II) 270.2 cc, (III) 483 cc, the differences between I and III, $p < 0.001$, stat.significant

Max. detrusor pressure: (I) 89.0 H₂O, (II) 73.2 H₂O, (III) 31.0 H₂O, the differences between I and III, $p < 0.005$, stat.significant

Residual urine: (I) 18.2 cc, (II) 26.2 cc, (III) 69.5 cc, the differences between I and III, $p < 0.05$ stat.significant

Conclusions: B. administered intrathecally by pump delivery increases the volume at the first hyperreflexic contraction, the max. cystometric bladder capacity and the residual urine, the max. detrusor pressure decreased considerably. Therefore after implantation of a B.pump possible effects on micturition must be checked, because unbalanced voiding could occur and could cause secondary damage to the lower urinary tract. In our 6 pat.s however, despite a considerable decrease of the detrusor pressure and an increase in the max. cystometric bladder capacity the uninhibited micturition remained balanced and no further measurements were necessary. It may well be that the relaxation of the striated sphincter by B. neutralizes the weakening of the detrusor, therefore micturition may remain balanced.

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Variation in the Apparent Diameter of the Female Urethra: An Example of Anisotropism

Introduction: The term anisotropism is derived from the Greek words *aniso* which is to be unequal or different and the verb *tropos* meaning to turn or direct. In the context of ultrasound this term implies that