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INTRAVESICAL GLUCIDIC CAPSAICIN VERSUS GLUCIDIC SOLVANT IN NEUROGENIC DETRUSOR OVERACTIVITY: A DOUBLE BLIND CONTROLLED RANDOMISED STUDY

Hypothesis / aims of study
The interest of vanilloids instillation for treating neurogenic detrusor overactivity (NDO) in spinal cord injured (SCI) patients is well established with an efficiency rate about 80% of the patients [1,2]. However, it remained limited in some patients by the poor tolerability of alcoholic vanilloids vesical administration largely due to the irritative effect of ethanol solvent [3].

The aim of our study was to evaluate the efficacy and tolerability of a new formulation of capsaicin diluted in glucidic solution.

Study design, materials and methods
Spinal cord injured patients suffering from urinary incontinence due to refractory NDO were prospectively enrolled in a double blind controlled study, and divided by randomisation between a capsaicin group (CG) and a solvant group (SG). On day 0 (D0), CG patients received an intravesical instillation of 100 ml capsaicin (1mM) diluted in glucidic solvant whereas SG patients received an intravesical instillation of 100 ml glucidic solvant alone.

Efficacy (voiding chart, MCC) and tolerability were evaluated on D0, then 1 (D30) and 3 months (D90) after treatment.

Results
33 patients, including 17 patients in the CG (11F/6M, 14 MS/3SCI) and 16 patients in the SG ((13F/3M, 142MS/4SCI) were prospectively included and completed the study. On D0, the two groups were strictly homogeneous concerning clinical and uro dynamical data. On D30, a significant improvement of continence, frequency and urgency were shown in CG, whereas SG patients received an intravesical instillation of 100 ml glucidic solvant alone.

Efficacy (voiding chart, MCC) and tolerability were evaluated on D0, then 1 (D30) and 3 months (D90) after treatment.

Interpretation of results
This first controlled study using glucidic capsaicin suggest its efficacy in clinical and urodynamical parameters relief in NDO patients in the short term. The glucidic capsaicin showed rapid main effect, obtained during the first month then progressively decreased. The global tolerance of glucidic capsaicin appears milder as compared to previous study using 30% ethanol capsaicin [1,3].

Concluding message
Overall, our results suggest the valubility of glucidic solvant for capsaicin vesical administration and justify to evaluate the maintenance of its efficacy and tolerance in the long term.

1) Fowler CJ. Intravesical treatment of overactive bladder. Urology 55 (Suppl 5A) 2000; 60-64.