

Corpus Cavernosum Electromyographic Parameters in Men with Preserved Erectile Function

Introduction and Objective: Assessment of genital autonomic nerves has an important role in sexual dysfunction evaluation. Corpus cavernosum electromyography is important in diagnosis of neurogenic erectile dysfunction. The objective is to assess methodological validity of corpus cavernosum electromyographic parameters in clinical following of erectile function in men without erectile dysfunction. Validation of corpus cavernosum electromyography as a method for assessment of autonomic innervation and smooth muscles of corpus cavernosum.

Materials and Methods: Our research has been conducted as prospective, controlled, opened and randomised study, and involves 50 men with preserved erectile function, older than 20 years. Research has been conducted in Urology Clinic, Clinical Center of Vojvodina, in two years time frame (June 2010 until July 2011). All patients had erectile function assessment, using International index of erectile function and corpus cavernosum electromyography conducted.

Results: In the observed group all patients had preserved (65.2%) to mild (32.8%) erectile function. Corpus cavernosum electromyographic parameters were constant in all subjects. Average amplitude in this group was $328.70 \pm 125.28 \mu\text{V}$, maximal amplitude $484.95 \pm 287.03 \mu\text{V}$, minimal amplitude $203.30 \pm 46.48 \mu\text{V}$, middle wave $58.84 \pm 27.08 \mu\text{V}$ and polyphase waves 3.35 ± 0.79 .

Conclusion: Using corpus cavernosum electromyographic parameters in group of patients with preserved erectile function shows validity of this method in clinical assessment of erectile function and its recovery after radical prostatectomy, but just in case when assessing nerve component of erectile function. Only few articles about this topic could be found and we consider that it is important to define those values in order to compare them to pathological ones.