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VAGINAL PUDENDAL NERVE STIMULATION: A COMPARISON TO ANAL STIMULATION IN PATIENTS WITH INCONTINENCE OF BLADDER AND/OR BOWEL

Hypothesis / aims of study

The anal stimulated pudendal motor latency (pntml) is an established electrophysiological procedure for evaluation of pudendal nerve. Pudendal motor latency after vaginal stimulation has only rarely been examined. Previous investigations have concentrated on healthy volunteers (1,2,3). If vaginal stimulation would be feasible and useful within a larger patient population was investigated in this study. Further a comparison of the results of anal versus vaginal stimulation was planned. The final question of the study was if vaginal stimulation would produce more information in certain disorders than anal stimulation, especially in disturbances of bladder function.

Study design, materials and methods

We examined 80 patients with incontinence of bladder and/or bowel with anal and vaginal stimulation of pudendal nerve. We used St-Marks-pudendal electrode and performed two measurements anally and vaginally at each side.

Footnote: Methods, definitions and units conform to the standards recommended by the International Continence Society, except where specifically noted.

Results

Average pntml after anal stimulation was 2,32 ms (SD = 0,51), after vaginal stimulation 2,32 ms (SD = 0,50). Latencies after vaginal stimulation were frequently higher in amplitude and more reproducible. Often patients found vaginal stimulation less bothering than anal examination. In 15 patients a remarkable difference between anal and vaginal latency could be found. In 10 patients, mostly with incontinence of bladder, anal latency was normal but vaginal latency was pathological.

Interpretation of results

Pudendal motor latency after vaginal stimulation is as feasible as anal stimulation in patients as in healthy volunteers. As vaginal stimulation often is easier and more agreeable for the patient, a routinely usage therefore is sensible. With special questions, especially disturbances of bladder function, vaginal stimulated pntml might even give more information than anal stimulated pntml.

Concluding message

Vaginal stimulated pudendal motor latency (pntml) was investigated in 80 patients with incontinence of bladder and/or bowel, additionally to routinely performed anal stimulation of pudendal nerve. This new method was found useful to perform in a clinical setting. With special questions, especially disturbances of bladder function, vaginal stimulated pntml might even give more information than anal stimulated pntml.

References

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