411

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PELVIC FLOOR PHYSIOTHERAPEUTIC ASSESSMENT: A VALUABLE CLINICAL TOOL

Hypothesis / aims of study

In functional bladder disorders, urologists usually perform investigations like urodynamics, before starting therapy. Nowadays, it is accepted that the relationship between the bladder and the pelvic floor can be relevant in these disorders. In this perspective, it makes sense to perform also a specific diagnostic work-up, focused on pelvic floor function, before starting treatment.

Study design, materials and methods

This diagnostic consultation is indicated as IPF: Investigation of Pelvic floor Function.

IPF consists of taking medical history and giving explanation on relevant anatomy and (patho) physiology. Medical history questions are general as well as related to voiding, defecation, gynecological, obstetrical and sexual matters. Also patients are asked about Quality of life (Kings Health Questionnaire) and the degree of complaints using a Visual Analogue Scale.

Finally patients are asked to perform a pad test (in case of incontinence) and to fill in a voiding diary.

The actual investigation of pelvic floor function includes physical examination, consisting of vaginal and anal visual inspection, a qualitative investigation of the pelvic floor function (using digital palpation) and finally a quantitative investigation of the pelvic floor function (using biofeedback-equipment). Qualitative investigation is focused on the levator ani and the puborectal muscle (intravaginal and anal). Anal investigation also involves the external and internal anal sphincters. This qualitative investigation starts with digital palpation, focused on sensitivity of the palpated areas, on pain (especially the puborectal muscle and surrounding areas) and on continuity of the anal sphincters. Next, the quality of the muscles is studied starting with the muscle tone at rest. Then the contractility is investigated, first the fast twitch activity, followed by the potential to relax, hereafter the slow twitch activity. Finally, the straining potential is investigated, asking to perform a pelvic floor muscle contraction, to relax and to strain.

For quantitative IPF, EMG registers the behavior of the pelvic floor during an identical sequence of tests as described above. In our hands, a muscle tone at rest of 1-2 mV is regarded as normal.

Results

In 100 consequitive patients with complaints of urgency/frequency, urge incontinence, fecal incontinence, constipation and/or sexual dysfunction, investigated between February and July 2005, the results were:

- 15 patients had a normal pelvic floor function
- 4 patients had a pelvic floor muscle under activity
- 81 patients had a pelvic floor muscle over activity; 60 of the 81patients also had a paradoxal pelvic floor function at straining

Interpretation of results

We were impressed by the number of patients with over activity of pelvic floor musculature.

Whether over activity is a the cause or a result of dysfunction of bladder, vagina and rectum in our patient population , is unclear; however it is obvious that in these patients in order to break through the vicious circle, treatment should be focused on relaxation instead of “pelvic floor exercises”. In our institute most of the patients have a resttone of the pelvic floor of > 2 μV; this phenomenon has important consequences for the treatment of functional bladder disorders, functional defecation problems and sexual dysfunctions.

Concluding message

Based on our results of the IPF, a diagnostic assessment of the pelvic floor function is to be advocated early in the treatment process.

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HUMAN SUBJECTS: This study did not need ethical approval because Pelvic Floor investigation is a normal part of treatment in our institute and did not follow the Declaration of Helsinki - with approval by the ethics committee - in the sense that investigation is a normal part of treatment in our institute Informed consent was not obtained from the patients.