Reviewer's report

Title: The effectiveness of pelvic floor muscle training alone and with other physical therapies for the treatment of stress urinary incontinence in women: a systematic review

Version: 2 Date: 23 December 2005

Reviewer: Anders Mattiasson

Reviewer's report:

General
This is a comprehensive review of studies in pelvic floor muscle training (PFMT) alone or in combination with other physical therapies in women with stress urinary incontinence. A valuable narrative overview of selected papers in the field is given, and the reference list can with advantage be used as a guide for those who want to go deeper. The authors have limited the analysis to the last ten years, i.e. from 1995 onwards. During this period 24 out of 7760 identified studies fulfilled the criteria for inclusion in this review. It is a mixture of mainly controlled level II studies but also other, uncontrolled studies that were found to qualify for this analysis. Other reviews in the field of lower urinary tract and related research such as Cochrane reports have arrived at similar proportions, e.g. for incontinence surgery. Because of dissimilarities in protocols and training methods a narrative format for the whole report was chosen. The authors also point out that "...methods used to describe severity varied considerably so that any comparisons should be made with caution".

Overall the review gives the reader a quick and in-depth view of what has been done in the field. The advantageous results of PFMT are striking. One of the weaknesses in the selected studies, in spite of their quality and hence approval for inclusion in this review, is that good and very good outcome measures often without specification have been added. The total figures of success with PFMT of “cure/improvement” at 73 to 97% therefore also seems higher than what might be referred to as a common average clinical impression. Besides the relatively wide definition of improvement, the patient selection for studies might have contributed to this high level.

The authors also discuss the difficulties to compare studies, partly due to lack of baseline data such as degree/amount of urinary leakage and partly due to differences in training regimes. Addition of other physical treatment modalities such as electrostimulation and vaginal cones did not seem to improve the results. The methodological heterogeneity tell us that standardisation of methods and also of evaluation protocols and choice of outcome measures are urgent steps to be taken. It is also recognized that there are difficulties with good control groups for comparison with PFMT with or without simultaneous addition of other forms of physical therapies. Several of the methodological difficulties are listed in the paper and suggestions for improvement of the research in the field are given. One of the conclusions drawn by the authors is that there is a need for further standardisation and agreement on e.g. outcome measures.

How PFMT works to improve continence status is not being discussed. It is only mentioned that improved pelvic floor tonus/thickness lift and support the urethra and bladder base. The role of direct muscle training is discussed and possible differences between the skills and strength training dimensions are essential parts of the discussion. Here the lack of controlled clinical experimental investigations could have been discussed. Indirect, neuromuscular effects and effects not only in the pelvic floor, but also in the lower urinary tract could have been discussed in this context. There is also a need to define what is accomplished with PFMT in addition to an improved continence status.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can
Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after discretionary revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:
I declare that I have no competing interests