
Does evidence support physiotherapy management of adult female chronic pelvic pain? A systematic review

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CRD summary

The review concluded that there seemed to be some limited evidence to support an effect of multidisciplinary intervention and Mensendieck somatocognitive therapy on female chronic pelvic pain, but further research was warranted. The evidence base had a number of limitations. The authors noted these drawbacks and appropriately urged a need for further research before definitive conclusions can be made.

Authors' objectives

To critically evaluate the evidence for an effect of physiotherapy on pain, physical activity and quality of life in the treatment of female chronic pelvic pain.

Searching

EMBASE, MEDLINE, CINAHL, PsycINFO, Cochrane Central Register of Controlled Trials (CENTRAL), PEDro and DARE were searched to September 2011. Search terms were reported. Relevant journals, conference proceedings and grey literature sources were searched. Reference lists of retrieved articles were searched. Study authors were contacted.

Study selection

Randomised controlled trials (RCTs), non-RCTs, cohort studies and case series of physiotherapy alone or in combination with other medical or psychological therapies in adult (over 19 years) women with chronic pelvic pain (using diagnostic criteria) were eligible for inclusion. Outcome measurements included validated pain scores (the primary outcome), quality of life and validated physical activity measurements.

The included studies considered a wide range of different physiotherapeutic interventions with various treatment frequencies and durations, often in combination with psychotherapeutic interventions. Control groups included surgery, placebo and standard gynaecological treatment. Studies were conducted in Scandinavia, the Netherlands, Brazil and USA and were published between 1991 and 2010. Mean ages of participants ranged from 30.5 to 43 years. Mean duration of pain ranged from 2.8 to 6.3 years.

Two reviewers independently performed study selection. Disagreements were resolved by discussion or consultation with a third reviewer.

Assessment of study quality

The quality of RCTs was assessed using the Cochrane Collaboration tool for appraisal of randomisation, allocation concealment, blinding, incomplete outcome data, selective reporting and other biases. The quality of non-RCTs was assessed using the Cochrane Non-Randomised Studies Methods Group guidance. Each quality item was rated as potential for bias, unclear or adequate and each study was rated as low, moderate or high risk of bias.

Two reviewers independently performed quality assessment.

Data extraction

Data were extracted on pain, quality of life, physical activity and other outcomes. Mean differences (MDs) were calculated for continuous data and risk ratios (RRs) were calculated for binary data, each with 95% confidence intervals (CIs). Data were reportedly extracted independently. Study authors were contacted, where required.

Two reviewers independently extracted data.

Methods of synthesis

A narrative synthesis was presented due to differences between the included studies.

Results of the review

Ten studies were included in the review (782 participants, range 21 to 370): six RCTs, one cohort study and three case-series. Three RCTs were deemed low risk of bias and three were deemed high risk of bias. Three non-RCTs were deemed high risk of bias and one was deemed moderate risk of bias. Follow-up ranged from two-three weeks to one year.

Three out of six RCTs showed statistically significant reductions in pain with physiotherapy versus comparator; the other three trials showed no significant difference. One RCT showed a significant improvement in movement and gait.

Non-RCT studies showed significant differences in pre and post-treatment pain measures. For specific interventions, there was low risk of bias evidence for a reduction in pain with Mensendieck somatocognitive therapy and low risk of bias evidence of pain reduction and level of daily activity improvements with multidisciplinary intervention.

Authors' conclusions

There seemed to be some limited evidence to support an effect of multidisciplinary intervention and Mensendieck somatocognitive therapy on female chronic pelvic pain; further research was warranted.

CRD commentary

Inclusion criteria for the review were clearly defined. Several relevant data sources were searched. Publication bias could not be assessed. Grey literature was searched. Attempts were made to reduce error and bias throughout the review. The quality of the evidence base was mixed, with half of the studies deemed to be at high risk of bias. The authors noted that both the internal and external validity of the evidence base was limited due to factors such as small and potentially selected samples, inadequate duration of pain treatment and different follow-up times.

A narrative synthesis was presented and this seemed appropriate given the type of evidence. The authors noted that most of the studies investigated physiotherapy in combination with other interventions, which made it impossible to determine the stand-alone value of physiotherapy.

The evidence base had a number of limitations. The authors noted these drawbacks and appropriately urged a need for further research before definitive conclusions can be made.

Implications of the review for practice and research

Practice: The authors stated that current clinical guidelines, textbooks and reviews of physiotherapy for chronic pelvic pain should be interpreted with caution.

Research: The authors stated that further high quality RCTs with sufficient treatment/follow-up times were needed to determine the effect of physiotherapeutic interventions for chronic pelvic pain. Somatocognitive therapy was a new approach that appeared to be promising and randomised clinical trials were underway in order to establish its evidence base.

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This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.