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[Intervention Review]

Conservative prevention and management of pelvic organ prolapse in women

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ABSTRACT

Background

Pelvic organ prolapse is common, and some degree of prolapse is seen in 50% of parous women. Women with prolapse can experience a variety of pelvic floor symptoms. Treatments include surgery, mechanical devices and conservative management. Conservative management approaches, such as giving lifestyle advice and delivering pelvic floor muscle training (PFMT), are often used in cases of mild to moderate prolapse. This is an update of a Cochrane review first published in 2004, and previously updated in 2006.

Objectives

To determine the effects of conservative management (physical and lifestyle interventions) for the prevention or treatment of pelvic organ prolapse in comparison with no treatment or other treatment options (such as mechanical devices or surgery).

Search methods

We searched the Cochrane Incontinence Group Specialised Trials Register (searched 6 May 2010), EMBASE (1 January 1996 to 6 May 2010), CINAHL (1 January 1982 to 10 May 2010), PEDro (January 2009), the UK National Research Register (January 2009), ClinicalTrials.gov (April 2009), Current Controlled Trials register (April 2009), CENTRAL (Issue 1, 2009) and ZETOC (January 2009) and the reference lists of relevant articles.

Selection criteria

Randomised and quasi-randomised trials in women with pelvic organ prolapse that included a physical or lifestyle intervention in at least one arm of the trial.

Data collection and analysis

Two reviewers assessed all trials for inclusion/exclusion and methodological quality. Data were extracted by the lead reviewer onto a standard form and cross checked by another. Disagreements were resolved by discussion. Data were processed as described in the Cochrane Handbook for Systematic Reviews of Interventions.

Main results

Six trials were included; three of these trials are new to this update. Four trials were small (less than 25 women per arm) and two had moderate to high risk of bias. Four trials compared PFMT as a treatment for prolapse against a control group (n = 857 women); two trials included women having surgery for prolapse and compared PFMT as an adjunct to surgery versus surgery alone (n = 118 women).

PFMT versus control

There was a significant risk of bias in two out of four trials in this comparison. Prolapse symptoms and women's reports of treatment outcomes (primary outcomes) were measured differently in the three trials where this was reported: all three indicated greater improvement in symptoms in the PFMT group compared to the control group. Pooling data on severity of prolapse from two trials indicated that PFMT increases the chance of an improvement in prolapse stage by 17% compared to no PFMT. The two trials which measured pelvic floor muscle function found better function (or improvement in function) in the PFMT group compared to the control group; measurements were not known to be blinded. Two out of three trials which measured urinary outcomes (urodynamics, frequency and both of symptoms, or symptom score) reported differences between groups in favour of the PFMT group. One trial reported bowel outcomes, showing less frequency and bother with symptoms in the PFMT group compared to the control group.

PFMT supplementing surgery versus surgery alone

Both trials were small and neither measured prolapse-specific outcomes. Pelvic floor muscle function findings differed between the trials: one found no difference between trial groups in muscle strength, whilst the other found a benefit for the PFMT group in terms of stronger muscles. Similarly findings relating to urinary outcomes were contradictory: one trial found no difference in symptom score change between groups, whilst the other found more improvement in urinary symptoms and a reduction in diurnal frequency in the PFMT group compared to the control group.

Authors' conclusions

There is now some evidence available indicating a positive effect of PFMT for prolapse symptoms and severity. The largest most rigorous trial to date suggests that six months of supervised PFMT has benefits in terms of anatomical and symptom improvement (if symptomatic) immediately post-intervention. Further evidence relating to effectiveness and cost-effectiveness of PFMT, of different intensities, for symptomatic prolapse in the medium and long term is needed. A large trial of PFMT supplementing surgery is needed to give clear evidence about the usefulness of combining these treatments. Other comparisons which have not been addressed in trials to date and warrant consideration include those involving lifestyle change interventions, and trials aimed at prolapse prevention.

PLAIN LANGUAGE SUMMARY

Conservative management of pelvic organ prolapse in women

Pelvic organs, such as the uterus, cervix, bladder or bowel, may protrude into the vagina because of weakness in the tissues that normally support them. The symptoms that they cause vary, depending on the type of prolapse. Conservative methods, such as pelvic floor muscle training (exercises to improve the pelvic floor muscles) or lifestyle changes (for example, avoiding lifting or losing weight), are commonly recommended for prolapse. The review looked for randomised trials of conservative methods, either to prevent or treat prolapse, from which to judge their effects.

Six trials were included. Four trials compared pelvic floor muscle training (PFMT) with no intervention, and two trials compared pelvic floor muscle training plus surgery to surgery alone. PFMT compared to no intervention was found in individual trials to improve prolapse symptoms, but data could not be combined. Data on prolapse severity was combined from two trials and results indicated that PFMT increases the chance of improvement in prolapse stage by 17% compared to no treatment. Pelvic floor muscle function appeared to be improved in women who received PFMT in the two trials which measured this. Bladder symptoms were improved with PFMT in two out of three trials measuring this; bowel symptoms were measured in one trial, and an improvement with PFMT was found.

The two trials which looked at the benefit of PFMT in addition to surgery, were small but of good quality. Findings were contradictory: women benefited from PFMT, in terms of urinary symptoms and pelvic floor muscle strength, in one trial but not the other.

The evidence from the trials suggests there is some benefit from conservative treatment of prolapse, specifically for PFMT as compared to no intervention. More randomised controlled trials are still needed to look at different regimens of PFMT, the cost in relation to benefit, and the long-term effects. The combination of PFMT and surgery requires to be evaluated in a large randomised trial. There is a dearth of trials addressing lifestyle changes as a treatment for prolapse, and trials aimed at prevention of prolapse. Trials of one type of conservative intervention versus another, and combinations of conservative interventions, are also lacking.