

Can exercise improve pain and function in pregnant women with pelvic girdle or low back pain?

To answer this question, we performed a comprehensive search of the PubMed database (June 2011) for randomized, controlled trials and systematic reviews from the past 10yrs that addressed this specific research question.

Four studies met the criteria for inclusion in this review, comparing education to education plus exercise (1), exercise and education to no treatment (2), education plus home exercise or supervised exercise (3), and standard treatment plus acupuncture or stabilization exercise (4).

Two studies showed a significant effect of exercise (1, 4). Kluge et al evaluated education or education with 10 wks of lumbopelvic exercise among 50 pregnant women with lumbar and/or pelvic girdle pain (1). Immediately after the intervention, significant improvements in pain and function were shown with exercise. Of note, a majority of women reported lumbar pain. Elden et al evaluated 6 wks of standard treatment plus acupuncture or pelvic

stabilization exercise among 386 pregnant women with pelvic girdle pain (4). One week after the intervention, acupuncture and stabilization exercise significantly reduced pain compared to standard treatment.

In contrast, two studies found no effect of exercise (2, 3). Haugland et al compared 4 wks of education and exercise to no treatment among 569 women with pelvic girdle pain during pregnancy (2). At 12 mos postpartum, pain had decreased in both groups. Study limitations included a high drop-out rate, and 60% of control subjects seeking outside treatment. Nilsson-Wikmar et al compared education to education plus 10-16 wks of pelvic stabilization exercise performed either at home or in a clinic setting among 118 women with pelvic girdle pain during pregnancy (3). By 12 mos postpartum, all subjects showed significant improvements in pain and function. In both of these studies, the type of exercises used do not appear to be classified as stabilization exercises.

Based on this review, specific lumbopelvic stabilization exercises appear useful on reducing pain and increasing function in pregnant women with lumbopelvic pain; however, additional research is needed.

Check with the provider of this newsletter to learn more about exercises appropriate for this condition.

1. Kluge J, Hall D, Louw Q, Theron G, Grové D. Specific exercises to treat pregnancy-related low back pain in a South African population. *Int J Gynaecol Obstet.* 2011 Jun;113(3):187-91. Epub 2011 Apr 1. PubMed PMID: 21458811.
2. Haugland KS, Rasmussen S, Daltveit AK. Group intervention for women with pelvic girdle pain in pregnancy. A randomized controlled trial. *Acta Obstet Gynecol Scand.* 2006;85(11):1320-6. PubMed PMID: 17091411.
3. Nilsson-Wikmar L, Holm K, Oijerstedt R, Harms-Ringdahl K. Effect of three different physical therapy treatments on pain and activity in pregnant women with pelvic girdle pain: a randomized clinical trial with 3, 6, and 12 mos follow-up postpartum. *Spine (Phila Pa 1976).* 2005 Apr 15;30(8):850-6. PubMed PMID: 15834325.
4. Elden H, Ladfors L, Olsen MF, Ostgaard HC, Hagberg H. Effects of acupuncture and stabilising exercises as adjunct to standard treatment in pregnant women with pelvic girdle pain: randomised single blind controlled trial. *BMJ.* 2005 Apr 2;330(7494):761. Epub 2005 Mar 18. PubMed PMID: 15778231; PubMed Central PMCID: PMC555879.