

Pregnancy-related pelvic girdle pain management

Tailored physiotherapy treatment strategies anchored in women's experiences and expectations

Akademisk avhandling

Som för avläggande av medicine doktorsexamen vid Sahlgrenska akademien, Göteborgs universitet kommer att offentligen försvaras i hörsal Arvid Carlsson, Academicum, Medicinaregatan 3, fredagen den 9 februari 2024, klockan 9.00

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Avhandlingen baseras på följande delarbeten

- I. Svahn Ekdahl A, Fagevik Olsén M, Jendman T, Gutke A. Maintenance of physical activity level, functioning and health after non-pharmacological treatment of pelvic girdle pain with either transcutaneous electrical nerve stimulation or acupuncture: a randomized controlled trial. *BMJ Open*. 2021;11(10):e046314.
- II. Ekdahl AS, Gutke A, Olsén MF, Mannerkorpi K. Expertise and individually tailored interventions are expected by pregnant women with pelvic girdle pain who seek physical therapy: a qualitative study. *Braz J Phys Ther*. 2023;27(2):100494.
- III. Svahn Ekdahl A, Fagevik Olsén M, Gutke A. Individually tailored physiotherapy interventions for pelvic girdle pain in pregnancy: treatment satisfaction, daily functioning and physical activity postpartum. A cross sectional study. (In manuscript)
- IV. Svahn Ekdahl A, Fagevik Olsén M, Gutke A. From pregnancy to three years after – maintenance of functioning & physical activity level among women treated for pelvic girdle pain in pregnancy. (In manuscript)

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Abstract

Introduction: Pregnancy-related pelvic pain (PGP) affects over half of all pregnant women. This pain can significantly impact daily activities and limit the ability to move freely, leading to reduced physical activity, which negatively impacts overall health.

Aim: This thesis aimed to investigate physiotherapy for PGP in pregnancy, focusing on treatment expectations, satisfaction, and the impact of management strategies on functioning, physical activity level, and symptoms in both short- and long-term perspectives.

Methods: A randomized controlled trial comparing acupuncture and Transcutaneous electric nerve stimulation (TENS) for PGP during pregnancy (*Paper I*). *Paper II* was a qualitative interview exploring pregnant women's expectations and needs before a physiotherapy consultation for PGP. *Paper III* was a cross-sectional evaluation of women's satisfaction with physiotherapy for PGP in pregnancy, and their functional status 4 months postpartum. In *Paper IV* a long-term follow-up of the study in Paper I was performed, assessing functioning, physical activity level, and symptoms 4 months and 3 years postpartum.

Results: Both acupuncture and TENS were effective in reducing pain intensity and concern about pain. No differences between treatment groups were detected and the women maintained their physical activity level, which is typically reduced in PGP (*Paper I*). Women with PGP experienced significant negative impacts on their daily lives, with a need for tailored advice and support from physiotherapists (*Paper II*). Most women were satisfied with the tailored physiotherapy they received for PGP in pregnancy. 4 months postpartum, 125 of 164 women experienced pain and impact on functioning to some extent. Concern about pain seemed to have an association with the level of functioning (*Paper III*). At 3 years postpartum, women who got physiotherapy for PGP in pregnancy still experienced limited functioning. No difference between treatment groups was detected. The level of functioning and concern about pain in pregnancy was associated with functioning 3 years postpartum (*Paper IV*).

Conclusion: Pelvic girdle pain significantly affects women's lives during and after pregnancy. Early identification and tailored treatment can lead to reduced discomfort, improved functioning, maintained physical activity levels and high treatment satisfaction. Concern about pain seemed to impact functioning, thus it is important to address, to possibly lower the risk of persistent pain.

Keywords: Physiotherapy, Pregnancy, Pelvic girdle pain, Women's health, Acupuncture, TENS, Phenomenology