

Should women train their pelvic floor during pregnancy? When to start and when to do?

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Postnatal stress urinary incontinence (SUI) is a common problem affecting up to 34% of women, while 3–5% have faecal incontinence.

Evidence suggests that vaginal delivery can contribute to damage to the pelvic floor through muscle and fascial injury as well as disrupting the nerve supply.

The National Institute of Clinical Excellence (NICE) recommends antenatal pelvic floor muscle training (PFMT) for all women in a first pregnancy for prevention of SUI based upon data from two randomised controlled trials (RCTs).

PFMT has been shown to reduce the incidence of postnatal SUI in the short term. However, in their 6-year follow-up study of postnatal PFMT, Glazener et al. showed a lack of long-term benefit with three-quarters of women still incontinent 6 years later.

In the study of 268 women with antenatal bladder neck mobility (previously shown to be a risk factor for developing postnatal SUI), it was found that fewer women in the intervention group had urinary incontinence compared with controls (19.2 versus 32.7%, $P = 0.02$) 3 months after delivery.

More recently Agur et al followed these patients up to 8 years since delivery and found that the significant improvement in postnatal SUI originally shown in the PFMT group compared with controls at 3 months was not evident 8 years later (35.4 versus 38.8%, $P = 0.7$). On direct questioning, 68.4% of the study group claimed that they still performed PFMT as taught during the study, with 38.0% of them performing this twice or more per week. There was no difference in outcome between those who performed PFMT twice or more per week compared with those performing PFMT less frequently. There were no differences in quality-of-life domains between the study and the control groups at 8 years.

Therefore the authors concluded that the initially beneficial effect of supervised antenatal PFMT on SUI did not continue for a long term despite the majority claiming to still perform PFMT. These findings are in keeping with those of other studies and raise concerns about the long-term efficacy of PFMT. Strategies to improve compliance with PFMT are required.

Despite the disappointing long-term results using antenatal PFMT and those of postnatal PFMT, nonetheless, the former has been recommended by the International Consultation on Incontinence (ICI) and NICE as a form of prevention of postnatal SUI in primigravidae. Further research into motivation techniques is required to improve compliance with PFMT (e.g. a national training programme starting in primary care).

Antenatal PFMT has been shown to be effective at shortening the first and second stage of labor in the primigravida. Antenatal PFMT may not increase the risk of episiotomy, instrumental delivery, and perineal laceration in the primigravida.

Stafne et al performed a RCT including a total of 855 women. The intervention was a 12-week exercise programme, including PFMT, conducted between 20 and 36 weeks of gestation. One weekly group session was led by physiotherapists, and home exercises were encouraged at least twice a week. The authors concluded that pregnant women should exercise, and in particular do PFMT, to prevent and treat urinary incontinence in late pregnancy. Thorough instruction is important, and specific pelvic floor muscle exercises should be included in exercise classes for pregnant women. The preventive effect of PFMT on anal incontinence should be explored in future trials.

The use of the pelvic floor muscle training for urinary incontinence treatment is well established but little is known about its effects in labor and newborn outcomes. Bo et al evaluated the effects of antenatal PFMT before and during pregnancy have increased risk of perineal lacerations, episiotomy, vacuum/forceps delivery, or acute cesarean delivery. The authors concluded that PFMT before and during pregnancy does not affect labor and birth outcomes or complication rates.