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TO TEAR AND TO HEAL

Pelvic floor dysfunction and childbirth

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Akademisk avhandling

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To tear and to heal – pelvic floor dysfunction and childbirth.

Abstract

Background: Up to 80% of women are affected by a perineal laceration after their first vaginal birth: 40–50% of lacerations involve the perineal muscles and up to 7% are obstetric anal sphincter injuries (OASI). There is a lack of knowledge about the extent of short-term complications such as pelvic floor dysfunction (PFD) following pelvic floor trauma. We know little of quality-of-life after OASI. Three-dimensional endoanal ultrasonography (3D-EAUS) is used to examine anal sphincter damage in other contexts. Combination with clinical examination has revealed injuries previously missed. Research into methods of screening for OASI is needed.

Aims: 1. To evaluate OASI diagnostics. 2. Determine associations of perineal or anal sphincter injury after childbirth with pelvic dysfunction. 3. Explore experiences after OASI.

Methods*:* Studies I and IV: prospective cohort-studies to evaluate associations between perineal or sphincter injury and PFD. Study II: interview study on how women experience OASI by qualitative content analysis. Study III: cross-sectional study to examine endoanal ultrasound detection of OASI. Participants were clinically examined after birth and 3D-EAUS was performed immediately after giving birth and 3 months postpartum. PFD was evaluated using a web-based questionnaire one year after delivery.

Results: In Study I, 511 women completed the questionnaire. A purposive sample of 11 women participated in Study II. In Study III, 680 women underwent clinical examination and 3D-EAUS after delivery. Study IV included 239 women who attended all follow-ups. PFD was experienced after any grade of perineal laceration, but even by women whose perineum was intact. Dyspareunia and urinary incontinence were the most common problems. Women with OASI ran a higher risk for developing symptoms of prolapse, urinary urge incontinence, dyspareunia, and pain, as well as experiencing a negative impact on daily life. Factors that augmented the experience of OASI were pain and symptoms of PFD, normalisation of symptoms by healthcare providers, and unrealistic expectations about this period in life. 3D-EAUS immediately after delivery had poor sensitivity and specificity in detecting clinically diagnosed OASI. Anal sphincter defects were associated with perineal pain and dyspareunia.

Conclusions: OASI is a risk factor for pelvic floor dysfunction after childbirth, but symptoms of PFD are common, even in women with mild to moderate perineal laceration. OASI has a negative impact on relationships, social contact, and sexuality. 3D-EAUS to diagnose OASI on the maternity ward is demanding since staff have little experience. Difficulties in obtaining good image quality due to local oedema, bleeding, positioning of the woman, and unintentional movements complicate the interpretation of immediate postpartum 3D-EAUS volumes.

Keywords pelvic floor disorders, endosonography, dyspareunia, perineum, pain, qualitative research, delivery

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