3 Repair of Episiotomy, First and Second Degree Tears

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3.1 Introduction

The morbidity associated with perineal injury related to childbirth constitutes a major health problem, affecting millions of women worldwide. The majority of women following vaginal delivery will suffer some degree of perineal pain or discomfort during the early postpartum period.\(^1\) In the UK alone, approximately 1,000 women per day will require perineal repair following vaginal birth. Pain associated with perineal trauma can be very distressing for the new mother and may interfere with her ability to breast feed and cope with the daily tasks of motherhood.\(^2\) It also appears to have a clear causal association with sexual dysfunction and ultimately may affect the woman's relationship with her partner.

In the UK, up to 44% of women will continue to have pain and discomfort for 10 days following birth\(^3\) and 10% of women will continue to have long-term pain at 18 months postpartum.\(^4\) Furthermore, 23% of women will experience superficial dyspareunia at 3 months postpartum;\(^5\) up to 10% will report faecal incontinence\(^6\) and approximately 19% will have urinary problems.\(^7\) The rates of complications reported by women depend on the severity of perineal trauma and on the effectiveness of treatment.

A North American, randomised controlled trial (RCT) of restrictive versus routine or liberal use of median episiotomy was performed by Klein and colleagues.\(^8\) They found that spontaneous tears were less painful than episiotomies, both immediately postpartum and at 3 months follow-up. At 3 months postpartum, 42% of women with an intact perineum versus 53% with a spontaneous tear, 54% with an episiotomy, and 79% with a third or fourth degree laceration experienced perineal pain. Nearly a quarter of the women with an episiotomy or third or fourth degree laceration described the pain as horrible and excruciating.\(^8\)

Following a detailed review of the literature relating to this particular area, several key issues emerged, which may have a direct effect on the extent of morbidity experienced by women following perineal repair. These issues include: the extent of perineal damage, the technique and materials used for suturing and the skill of the person performing the procedure. If the suturing is performed perfunctorily it may have a major impact on women’s health as well as significant implications for health service resources. It is important that practitioners ensure that routine procedures, such as perineal repair, are evidence-based in order to provide quality care that is effective, appropriate and cost-efficient, as set out in the UK’s government consultation document \textit{A first class service}.\(^9\) However, it would appear that a dichotomy exists between some aspects of routine practice and the utilisation of research findings. There are a number of reasons given for this, some of which include lack of knowledge and skills, resistance to change, personal preference, tradition, restrictive local policies and lack of support.\(^10\)
3.2 Prevalence

Despite the fact that maternity care has vastly improved over the past decade, women still sustain various degrees of perineal trauma following vaginal births. This is one aspect of childbirth that women appear to be unprepared for. Findings from a fairly recent large RCT indicate that 85% of women who have a vaginal birth will sustain some form of perineal trauma\(^{11}\) and up to 69% of these will require stitches.\(^7,11\) However, these rates vary considerably according to the policies of individuals, and institutions throughout the world. It is difficult to ascertain global rates of spontaneous perineal trauma requiring suturing due to classification inconsistencies and a lack of reporting perineal trauma.

3.3 Definition

Perineal trauma during vaginal birth may occur either spontaneously or when the midwife or obstetrician facilitates delivery by making a surgical incision (episiotomy) to increase the diameter of the vulval outlet. The term “episiotomy” actually refers to cutting the pudenda (external genitalia), whereas the term “perineotomy” is defined as an incision of the perineum and is the more accurate term.\(^{12}\)

Anatomically, the perineum extends from the pubic arch to the coccyx and is divided into the anterior urogenital and posterior anal triangle. Anterior perineal trauma is defined as injury to the labia, anterior vagina, urethra or clitoris. Trauma in this area is associated with less morbidity. Little is known about the long-term effects of anterior perineal trauma. Posterior perineal trauma is defined as any injury to the posterior vaginal wall, perineal muscles or anal sphincters (external and internal) and may include disruption of the rectal mucosa.\(^{13}\)

3.4 Classification of Perineal Trauma

Spontaneous perineal trauma can be subdivided into the following classifications according to the extent of the tissue damage:

1. First degree, which is very superficial and may involve:
   - skin and subcutaneous tissue of the anterior or posterior perineum
   - vaginal mucosa
   - a combination of the above resulting in multiple superficial lacerations.

2. Second degree, which is deeper and may involve:
   - superficial perineal muscles (bulbospongiosus, transverse perineal)
   - perineal body.

Second degree trauma usually extends downwards from the posterior and/or lateral vaginal walls, through the hymenal remnants, towards the anal margin and it usually occurs in the weakest part of the stretched perineum. If the trauma is very deep, the levator ani muscles (pubococcygeus) may be disrupted. Less frequently, the tear extends in a circular direction, behind the hymenal remnants, bilaterally upwards towards the clitoris, causing the lower third of the vagina to detach from underlying structures.\(^{14}\) This type of complex trauma causes vast disruption to the perineal body and muscles but the perineal skin may remain intact, making it difficult to repair.

An episiotomy usually involves the same structures as a second degree tear but occasionally spontaneous trauma may occur simultaneously, resulting in more complex perineal injury.

3.5 Training

Prior to 1970, midwives in the UK were not permitted to perform perineal repairs and midwifery textbooks contained very little information relating to this particular area of childbirth. In fact, it was not until 1983 that perineal repair was included in the midwifery curriculum in the UK when the European Community Midwives Directives came into force and the CMB issued the following statement: “Midwives may undertake repair of the perineum provided they have received instruction and are competent in this procedure”.

It is current practice in the UK for the attending midwife to suture perineal trauma, which has been sustained during a normal delivery,