How to perform an episiotomy

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Rationale and key points

An episiotomy may be necessary to assist some women to give birth. An episiotomy is a surgical incision intentionally made to increase the diameter of the vulval outlet to enable childbirth.

- Midwives and doctors should use their clinical judgement and skills to assess when to perform an episiotomy.
- An episiotomy should not be performed routinely; its use should be restricted to certain indications.
- Adequate pain relief should be provided before performing an episiotomy.

Reflective activity

Clinical skills articles can help update your practice and ensure it remains evidence based. Apply this article to your practice. Reflect on and write a short account of:
1. How you think this article will change your practice.
2. The risk factors that can predispose a woman to have an episiotomy despite the presence of a clinical indication, such as fetal distress. Subscribers can upload their reflective accounts at: rcni.com/portfolio.

Preparation and equipment

- When an episiotomy is performed, it is important that practitioners know which perineal tissues and muscles are involved, including the posterior vaginal wall, subcutaneous fat, perineal skin layer, superficial muscles (bulbocavernous and transverse perinei) and deep muscle (pubococcygeus) (Figure 1) (Steen 2013).
- Midwives and doctors should use their clinical judgement to evaluate when to perform an episiotomy.
- Adequate pain relief should be provided before performing an episiotomy.
- The practitioner should ensure the woman understands why an episiotomy is necessary, explain the procedure and gain informed verbal consent.
- The practitioner should ensure the necessary equipment is available, including:
  - An appropriate source of light.
  - Sterile gloves.
  - Sterile water or an antiseptic solution, depending on local policy, for cleansing the perineal area.
  - A needle and syringe containing 1% lidocaine.
  - A pair of surgical scissors suitable for episiotomy (straight blades with rounded ends).

Procedure

1. Wash your hands, put on the sterile gloves and cleanse the perineal area with sterile water or an antiseptic solution, using aseptic technique.
2. Ensure that the woman has adequate pain relief. If the woman has had an epidural, she may need a ‘top-up’. If she has not, it may be beneficial to offer nitrous oxide (Entonox®) before infiltrating a local anaesthetic.
3. Check that the woman has no contraindications to lidocaine.
4. Perform infiltration of the local anaesthetic (steps 5-8) using a needle and syringe containing 1% lidocaine – 10-15mL should be effective; the maximum dose is 20mL, which should be taken into consideration when undertaking repair of an episiotomy (Steen and Cummins 2016).
5. Place two fingers into the woman’s vagina to protect the presenting part of the infant and to guide infiltration of the local anaesthetic.
6. Insert the needle into the perineal tissue at the midpoint of the fourchette (a fold of skin forming the posterior margin of the vulva), and direct the angle of the needle midway between the ischial tuberosity and the anus (Figure 2).

7. Withdraw the syringe piston slightly and aspirate to check that the tip of the needle is not in a blood vessel. If blood is aspirated, reposition the needle.

8. Infiltrate slowly, withdrawing the needle and syringe while continuously injecting the local anaesthetic. To achieve hyperanalgesia around the incision site, infiltrate the lidocaine initially at a 45° angle drawing back towards the fourchette and then to each side of this angle.

9. Wait for approximately three to five minutes for the local anaesthetic to take effect. Check with the woman that local anaesthesia has been achieved. Occasionally, the woman may give birth spontaneously following infiltration of a local anaesthetic, and an episiotomy will not be required.

10. Place two fingers into the woman’s vagina and insert the surgical scissors at the midpoint of the fourchette (Figure 3).

11. Perform the episiotomy during a contraction, since this promotes clear vision of the stretched perineum and minimises the risk of severe bleeding.

12. Perform the incision at an angle between 45° and 60° from the fourchette with one single cut, approximately 4-5cm in length.

13. Proceed to facilitate the birth and control the birthing of the head to reduce the risk of the incision extending.

14. Apply firm pressure to the episiotomy wound between contractions if birth of the head is not imminent to reduce the amount of bleeding and minimise the risk of post-partum haemorrhage.

15. Assess the incision, perineum, vagina, vulva and rectum following the third stage of labour to identify the severity of perineal trauma and any labial tears (National Institute for Health and Care Excellence (NICE) 2014).

16. Repair the episiotomy wound and any other trauma identified promptly.
Evidence base

An episiotomy is the most common surgical procedure performed on women worldwide (Dixon 2014). NICE (2014) guidelines on intrapartum care recommend that an episiotomy should only be performed if there is a clear clinical indication for intervention, for example when the infant is showing signs of distress or when a forceps delivery is deemed necessary (Carroli and Mignini 2009), or if a woman has problems associated with female genital mutilation, or has severe hypertension or a cardiac condition (Hakim 2001, American Academy of Family Physicians (AAFP) 2012). There has been a steady decline in episiotomy rates in some developed countries over the past 30 years (Dixon 2014). However, there is still a wide variation in episiotomy rates globally, despite robust evidence to restrict its use (Steen 2012).

An episiotomy should only be performed when the perineum has been stretched and thinned by the presenting part of the infant (Charles 2013). An episiotomy should not be performed too early since this may cause excessive bleeding, can predispose the wound to the formation of a haematoma and is associated with increased maternal morbidity and perineal pain (NICE 2014).

There is no justification for performing an episiotomy for indications such as button-holing (when the perineum shows signs of developing a tear similar to a button hole), rigid perineum or previous scarring (Enkin et al 2000). However, perineal body length (PBL) measured from the fourchette to the midpoint of the anal canal appears to be an associated risk factor for obstetric anal sphincter injuries (Geller et al 2014). The average PBL is reported to be 37-38mm (van Roon et al 2015). Deering et al (2004) reported that women with a PBL <25mm had a significantly increased risk of obstetric anal sphincter injuries (40% versus 5.6%, P=0.004). Therefore, further research is necessary to evaluate whether a PBL <25mm would be a justification for performing an episiotomy. An episiotomy should not be performed to avoid a third or fourth-degree tear, since the evidence base is limited (NICE 2014).

There is evidence that an episiotomy does not protect a pre-term head from intracranial haemorrhage and should not be performed for this purpose (Adams 2013). Restrictive rather than routine use of episiotomy is recommended for breech birth (Royal College of Obstetricians and Gynaecologists 2006). An episiotomy may be advocated when a woman has problems associated with female genital mutilation (Hakim 2001). It may also be considered when shoulder dystocia occurs to give the practitioner improved access to undertake manoeuvres to assist the birth of a baby (AAFP 2012).

When an episiotomy is performed the tissue layers involved are similar to a second-degree tear. However, there is evidence to suggest that a tear heals better (McGuinness et al 1991).

Two types of episiotomy may be performed (Figure 4). The first is the mediolateral episiotomy or incision. This is associated with an increased risk of damage to the levator ani muscle, a reduction in pelvic floor strength and increased dyspareunia (Sartore et al 2004). However, a mediolateral incision minimises the risk of extension and is recommended by NICE (2014) when an episiotomy is deemed necessary. The second type of episiotomy is the midline incision. This is associated with an
increased risk of a third or fourth-degree tear and incontinence (Eason et al 2002).

A Cochrane review examined the risks and benefits of restrictive versus routine episiotomy and evaluated the effects of a mediolateral incision versus a midline incision. The review found a lower risk of posterior perineal trauma with restrictive episiotomy (relative risk (RR) 0.67, 95% confidence interval (CI) 0.49 to 0.91), less need for suturing (RR 0.71, 95% CI 0.61 to 0.81) and fewer healing complications (RR 0.69, 95% CI 0.56 to 0.85) regardless of the type of incision. The evidence to support the use of a mediolateral incision versus a midline incision was inconclusive (Carrol and Mignini 2009).

Cunningham et al (2005) reviewed the evidence to support the use of scissors or a scalpel to perform an episiotomy. Their findings suggest that when scissors are used there is less risk of causing damage to the presenting part of the infant and good homeostasis is promoted. They reported that using a scalpel can minimise the severity of trauma and is associated with improved healing. However, scissors are predominately used in clinical practice (Steen 2012). When performing a mediolateral episiotomy, scissors have been designed to attain a post-suturing angle of 40–60° to reduce doctor or midwife error in estimating the angle of the incision (van Roon et al 2015).

Disclaimer: please note that information provided by Nursing Standard is not sufficient to make the reader competent to perform the task. All clinical skills should be formally assessed at the bedside by a nurse educator or mentor. It is the nurse’s responsibility to ensure their practice remains up to date and reflects the latest evidence.

USEFUL RESOURCES

- King Edward Memorial Hospital (2014) Episiotomy and Infiltration of the Perineum. tinyurl.com/7jz2b3 (Last accessed: January 26 2016.)
- Queensland Centre for Mothers and Babies (2012) Choices about Episiotomy: A Decision Aid for Women Having a Vaginal Birth. tinyurl.com/jhs9lr (Last accessed: January 26 2016.)

References


