Episiotomy and PERINEAL TEARS

Episiotomy

Episiotomy is a surgical incision to enlarge the vaginal introitus. An episiotomy is a surgical cut, performed with scissors.

The decision to perform an episiotomy is made by the birth attendant.

The worldwide rates of episiotomy vary dramatically (14% in England, 8% in the Netherlands, 50% in the USA).

There is clear evidence to recommend a ***restricted use of episiotomy***.

indications

❖Complicated vaginal delivery:

- breech
- shoulder dystocia
- forceps
- ventouse.

❖ If there is extensive lower genital tract scarring:

- female genital mutilation
- poorly healed 3rd or 4th degree tears.

❖ When there is fetal distress.

❖ It is also often recommended if there is an indication that there may be extensive perineal trauma such as the appearance of multiple vaginal/ perineal tears or perineal button-holing.

Types of episiotomy

•Mediolateral episiotomy extends from the fourchette laterally(at a 60° angle to the midline) (thus reducing the risk of anal sphincter injury).

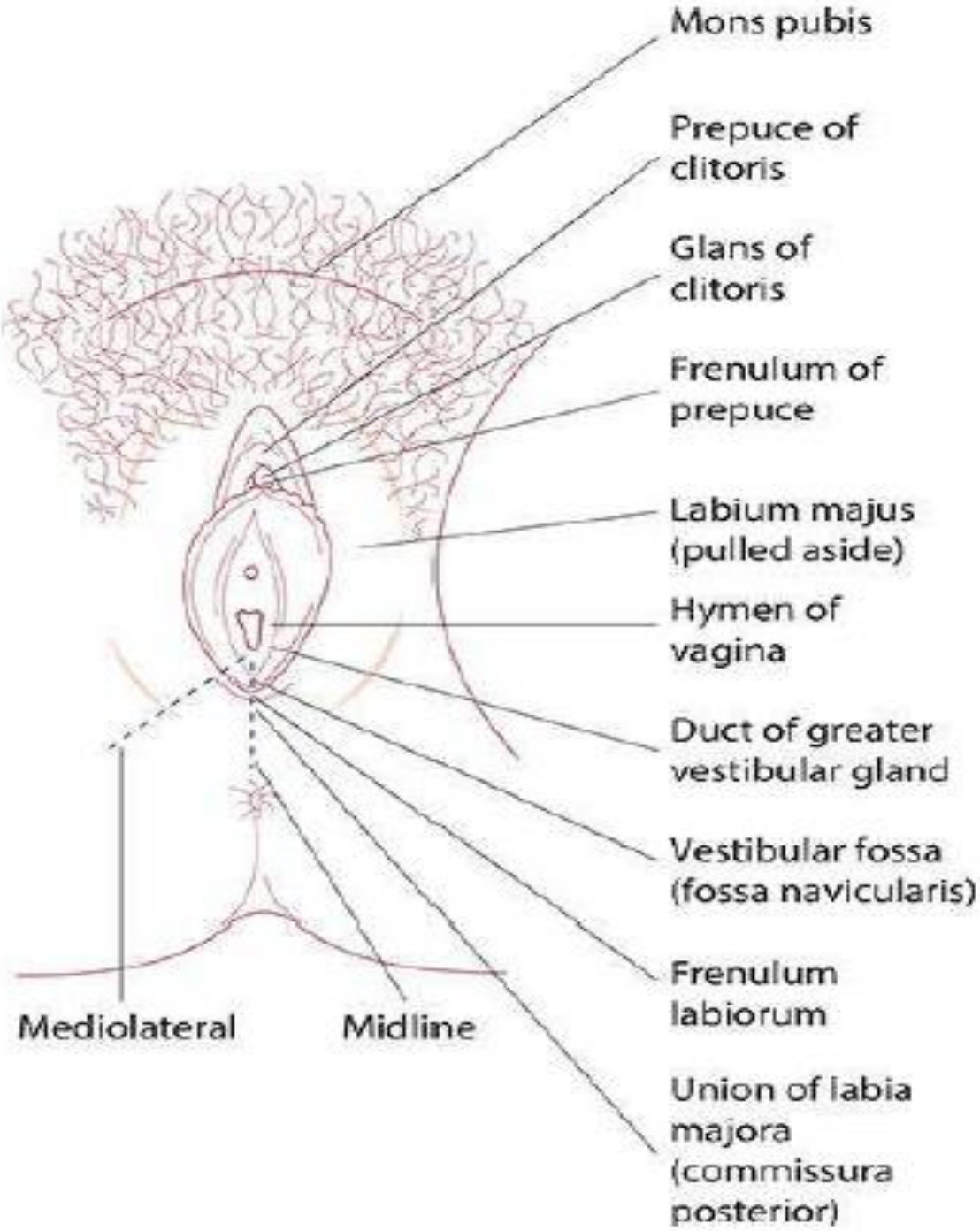
•Midline episiotomy extends from the fourchette towards the anus in a comparatively avascular area and results in

1-less bleeding,

2-quicker healing

3- less pain;

4-there is an increased risk of extension to involve the anal sphincter (OASI).


Mons pubis
Prepuce of clitoris
Glans of clitoris
Frenulum of prepuce
Labium majus (pulled aside)
Hymen of vagina
Duct of greater vestibular gland
Vestibular fossa (fossa navicularis)
Frenulum labiorum
Union of labia majora (commissura posterior)
Mediolateral
Midline

How to perform an episiotomy

- If the woman does not have a working regional block (epidural) then the perineum should be infiltrated with lidocaine (lignocaine).
- Two fingers should be placed between the baby's head and the perineum (to protect the baby).
- Sharp scissors are used to make a single cut in the perineum about 3–4cm long (ideally this should be at the height of the contraction when the perineum is at its thinnest).

- Every effort should be made to anaesthetize the perineum early to provide sufficient time for effect.
- It will cause bleeding so must not be done too early and should be repaired as soon as possible.
- Always check for any extension or other tears (including a PR examination to ensure no trauma to the anal sphincter).

Women who have undergone female genital mutilation should be seen antenatally and de-infibulation discussed. However, it they present in labour the episiotomy should be anterior and upwards.

Definition of perineal trauma

- 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.
- Posterior perineal trauma: any injury to posterior vagina, perineal muscles, anal sphincters and anal epithelium.
- Perineal trauma may occur spontaneously or by a surgical incision (episiotomy) during vaginal birth.

- Of women who have a vaginal delivery, 85% will have some degree of perineal trauma and 60–70% will require suturing.
- Third- and fourth-degree tears are grouped together and termed obstetric anal sphincter injuries (OASI)
- The incidence of obstetric anal sphincter injury is 1% of all vaginal deliveries.

Increase in detection of anal sphincter injury is due to

- 1. increased awareness and training.
- 2. Use of endoanal ultrasound

classification

- The first important step following birth of the baby and delivery of the placenta is to examine the woman carefully to classify the perineal tear.
- Perineal tears should be classified as first, second, third or fourth degree, and when in doubt the operator should classify according to a higher rather than lower grade .

This will ensure that the woman receives optimal care.

following classification, described by Sultan, and adopted by the RCOG:

First degree	Injury to perineal skin only
Second degree	Injury to perineum involving muscles but not anal sphincter
Third degree	Injury to perineum involving the anal sphincter complex
IIIa	<50% of EAS torn
IIIb	>50% of EAS torn
IIIc	Both the EAS and IAS torn
Fourth degree	Fourth-degree lacerations involve the perineal fascia and muscles, both the EAS and the IAS, and the rectal mucosa

EAS: external anal sphincter; IAS: internal anal sphincter.

Factors that contribute to the extent of trauma and perineal tear during childbirth are:

- Ethnicity
- Age
- Nutritional state in the prepregnancy years.
- birth weight over 4 kg.
- persistent occipitoposterior position.
- nulliparity .
- induction of labour .
- epidural analgesia.
- second stage longer than 1 hour
- shoulder dystocia.
- midline episiotomy .
- forceps delivery.
- Direct occipitoposterior position
- Precipitate birth.

The folowing may reduce the risk of perineal damage:

Antenatal perineal massage: Some women perform perineal massage in the antenatal period and this may reduce the risk or extent of tearing.

factors that influence the outcome of perineal repair.

In general terms, the outcome

external anal sphincter incompetence causes faecal urgency, whereas internal anal sphincter incompetence causes faecal incontinence.

The factors affecting it

1-The type of suturing material.

2-the technique of repair.

3- the skill of the operator.

Surgical technique

A--First-degree tears or minor lacerations with minimal or no bleeding may not require surgical repair.

B--A systematic approach should be followed for second degree perineal repair .

1-An explanation should be provided to the mother and verbal consent should be documented, or written consent if a complex tear requires repair in an operating theatre.

2-Adequate analgesia should be provided by topping up an epidural or by infiltration with local anaesthetic.

3--The operator should check the extent of grazes and lacerations with a vaginal and rectal examination. Sometimes, the anatomy is not clear and assessment is improved following positioning in lithotomy with effective anaesthesia.

- 4--If a tear is more complex than initially appreciated, a more experienced operator may be required
- 5-- It may be helpful to place a pad or tampon high in the vagina to prevent blood loss from the uterus obscuring the view. Care needs to be taken that this is removed at the end of the procedure

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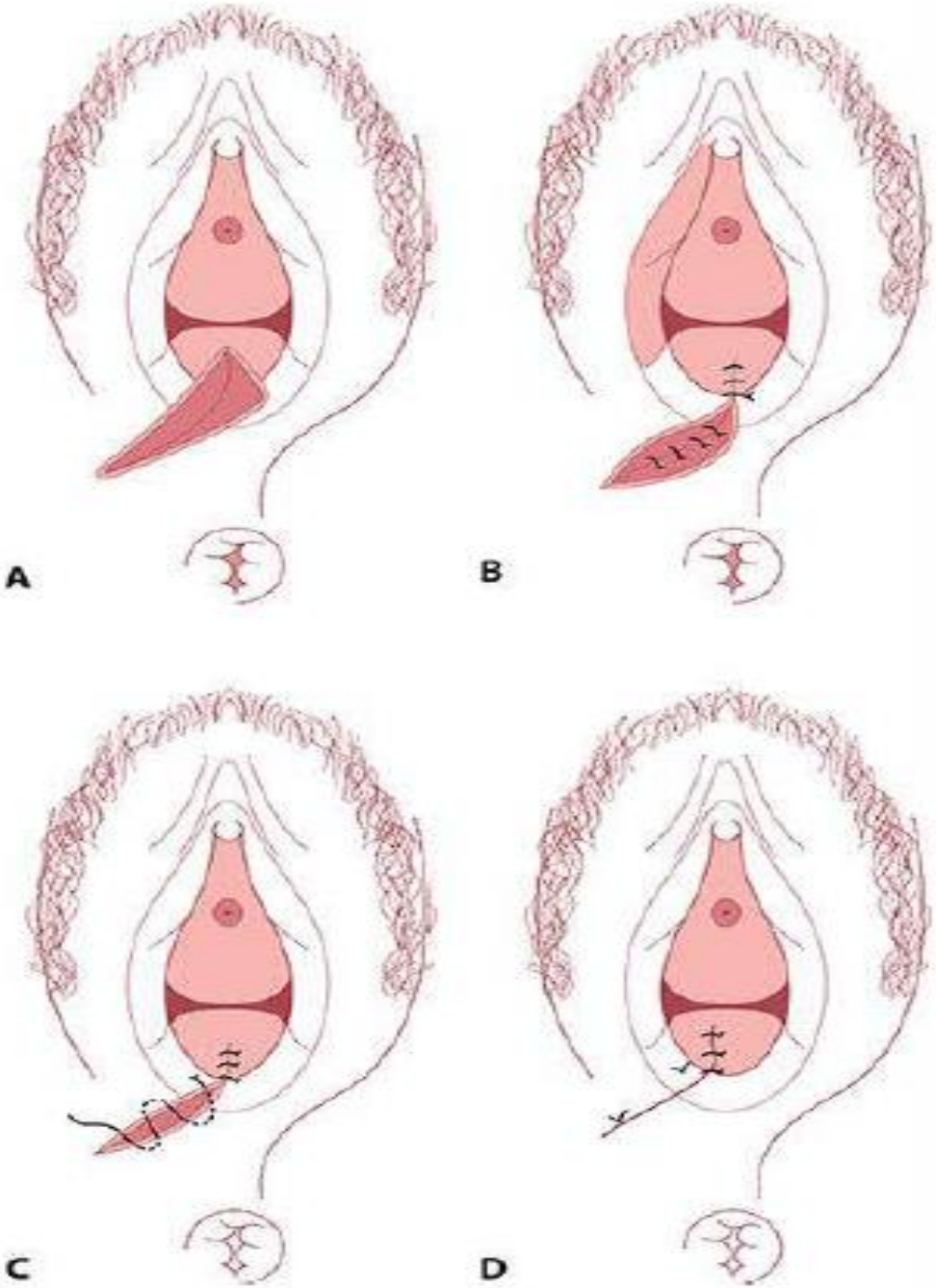
•6-- The vaginal mucosa is repaired first using rapidly absorbable suture material on a large, round body needle. A knot should be tied above the apex of the cut or tear (as severed vessels retract slightly) and a continuous stitch should be used to close the vaginal mucosa.

7--Interrupted sutures are then placed to close the muscle layer.

•8--Closure of the perineal skin follows with either interrupted sutures or a continuous subcuticular stitch, which produces more comfortable results.

•9--A gentle vaginal examination should be performed to check for any missed tears and to ensure that good apposition has been achieved.

- **10--**A rectal examination should be performed to confirm that the sphincter feels intact and to ensure that no sutures have been inadvertently placed through the rectal mucosa. If sutures are felt in the rectum they must be removed and replaced.
- **11--**The pad or tampon should be removed and a careful count of swabs, instruments and needles should be completed and documented in the records, alongside the operation note and postoperative instructions.
- **12--**Analgesia should be prescribed.


A
B
C
D

C--OASI repair

1-Repair of third- and fourth-degree tears should be performed or directly supervised by a trained practitioner.

2-There must be adequate analgesia. In practice, this means either a regional or general anaesthetic, as local infiltration does not allow relaxation of the sphincter enough to allow a satisfactory repair.

3-The lighting must be adequate and an assistant is usually needed.

4-Repair of the rectal mucosa should be performed first.

5-The torn external sphincter is then repaired.

6-It is important to ensure that the muscle is correctly approximated with long-acting sutures so that the muscle is given adequate time to heal.

7-The remainder of the perineal repair is as for second-degree trauma.

8- The surgical repair should be documented and a clinical incident form should be completed for risk assessment purposes

OASI aftercare

1-Lactulose (laxative) and a bulking agent, such as Fybogel™, are recommended for 5–10 days and the woman should remain in hospital until she has had a first bowel motion.

2-An oral broad-spectrum antibiotic should be prescribed for 5–7 days to reduce the risk of infection.

3-Regular oral analgesia should also be prescribed.

4-physiotherapy should include augmented biofeedback as this has been shown to improve continence.

5-should be offered follow-up in the postnatal period. A team approach is ideal within a specialist clinic;

At 6–12 weeks, a full evaluation of the degree of symptoms should take place. This must include careful questioning with regard to faecal and urinary symptoms and advice in relation to future pregnancy and delivery..

future pregnancy and delivery

A-Asymptomatic women should be advised that the risk of recurrence in a future pregnancy is 6–8% and that vaginal delivery is safely achievable.

B-Symptomatic women should be offered investigation including endoanal ultrasound and anal manometry).

Women with ongoing troublesome symptoms should be offered an elective caesarean section

the role of Episiotomy in prevention of perineal tear

A number of randomized controlled trials (RCTs) were conducted comparing restrictive versus routine use of episiotomy , which demonstrated that a restrictive approach resulted in

1-less posterior perineal trauma

2- less need for suturing

3- no difference in pain, urinary incontinence or dyspareunia

A routine episiotomy was not protective of more severe perineal tears (OASI).).

A mediolateral episiotomy should start at the posterior part of the fourchette, move backwards and then turn medially well before the border of the anal sphincter, so that any extension will avoid thesphincter .

The episiotomy should be repaired in the same way as a second-degree tear unless there has been involvement of the anal sphincter complex requiring an OASI repair.

Complications

Short-term complications of perineal trauma or episiotomy include pain, infection and haemorrhage.

Long-term effects include dyspareunia, incontinence of urine and incontinence of flatus or faeces. • Scarring, with potential disruption to the anatomy.

• Very rarely, fistula formation The risks are highest with OASI, especially if an anal sphincter injury has been missed. These morbidities can have a profound impact on women's health, relationships and self-esteem.