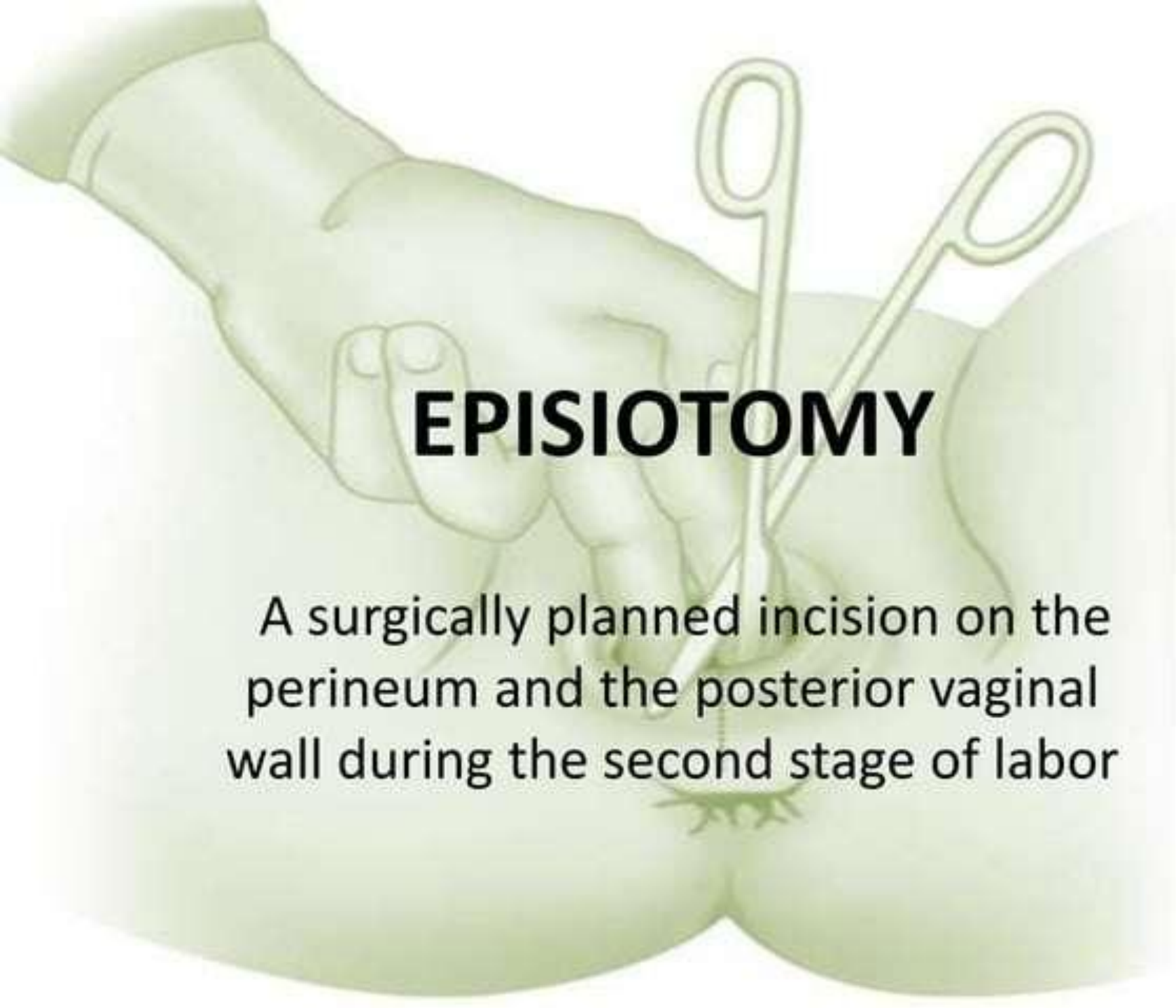


EPISIOTOMY

A surgically planned incision on the perineum and the posterior vaginal wall during the second stage of labor

OBJECTIVES

- To enlarge the vaginal introitus
  - Facilitate easy and safe delivery of the fetus (spontaneous or manipulative.)
- To minimize overstretching and rupture of the perineal muscles and fascia
  - to reduce the stress and strain on the fetal head.

INDICATIONS

- **In elastic (rigid) perineum**
- **Anticipating perineal tear**
- **Operative delivery**
- **Previous perineal surgery**

COMMON INDICATIONS

(1) threatened perineal injury in primigravidae

(2) rigid perineum

(3) forceps, breech, occipitoposterior or face delivery.

Timing

- Bulging thinned perineum during contraction just prior to crowning (when 3–4 cm of head is visible)

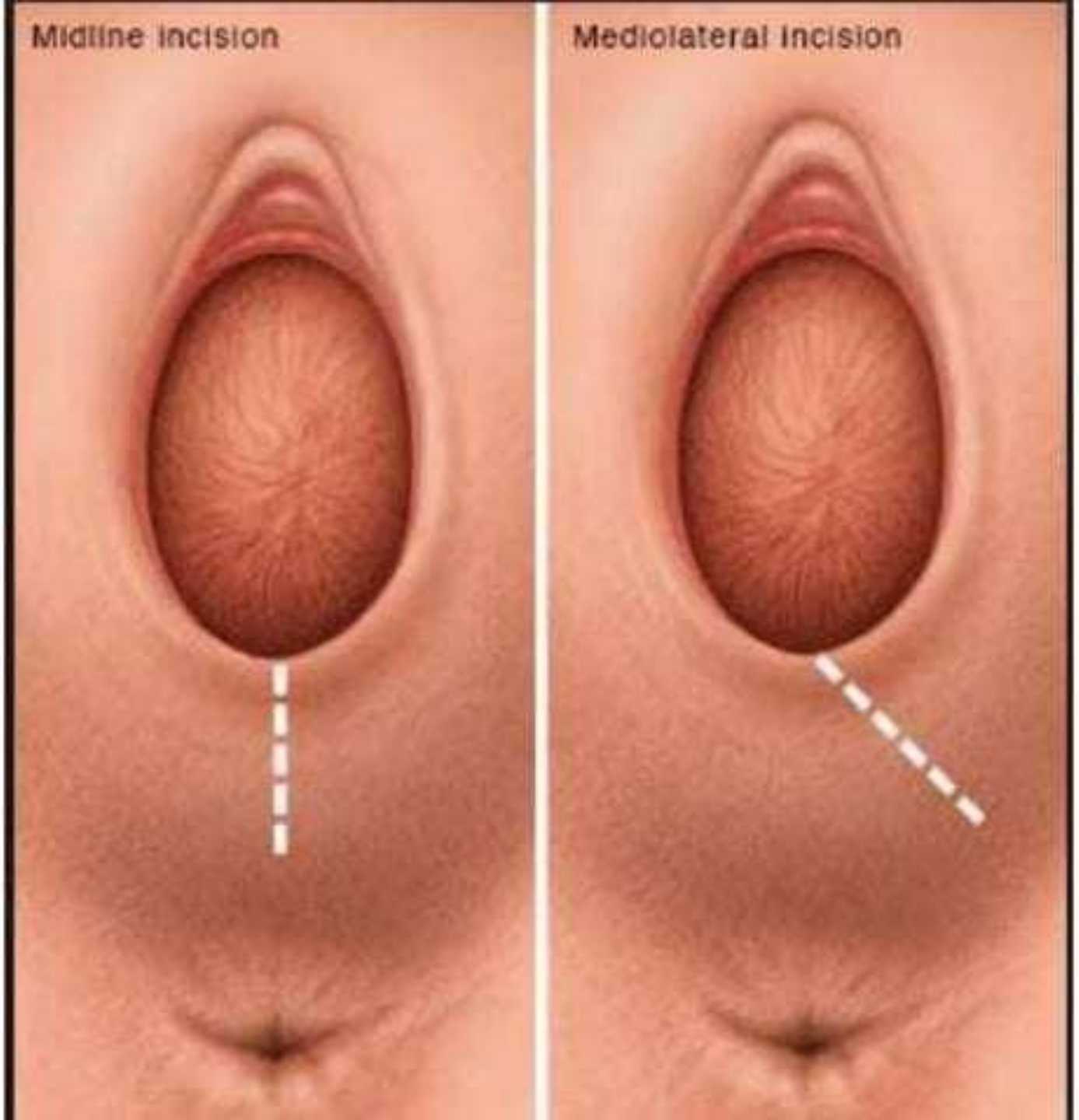
- During forceps delivery, it is made after the application of blades.

If done early,

– the blood loss will be more.

If done late,

– it fails to prevent the invisible lacerations of the perineal body


Midline incision
Mediolateral incision

ADVANTAGES

- **Maternal:**
  (a) a clear and controlled incision is easy to repair and heals better
  (b) reduction in the duration of second stage
  (c) Reduce the trauma to muscles

- **Fetal:**
  – It minimizes intracranial injuries

TYPES

- **MEDIOLATERAL:**
  The incision is made downwards and outwards from the midpoint of the fourchette either to the right or to the left. It is directed diagonally in a straight line which runs about 2.5 cm away from the anus (midpoint between anus and ischial tuberosity).

- **MEDIAN:**
  The incision commences from the center of the fourchette and extends posteriorly along the midline for about 2.5 cm

- **LATERAL:**
  The incision starts from about 1 cm away from the center of the fourchette and extends laterally. It has got many drawbacks including chance of injury to the Bartholin's duct. It is totally condemned.

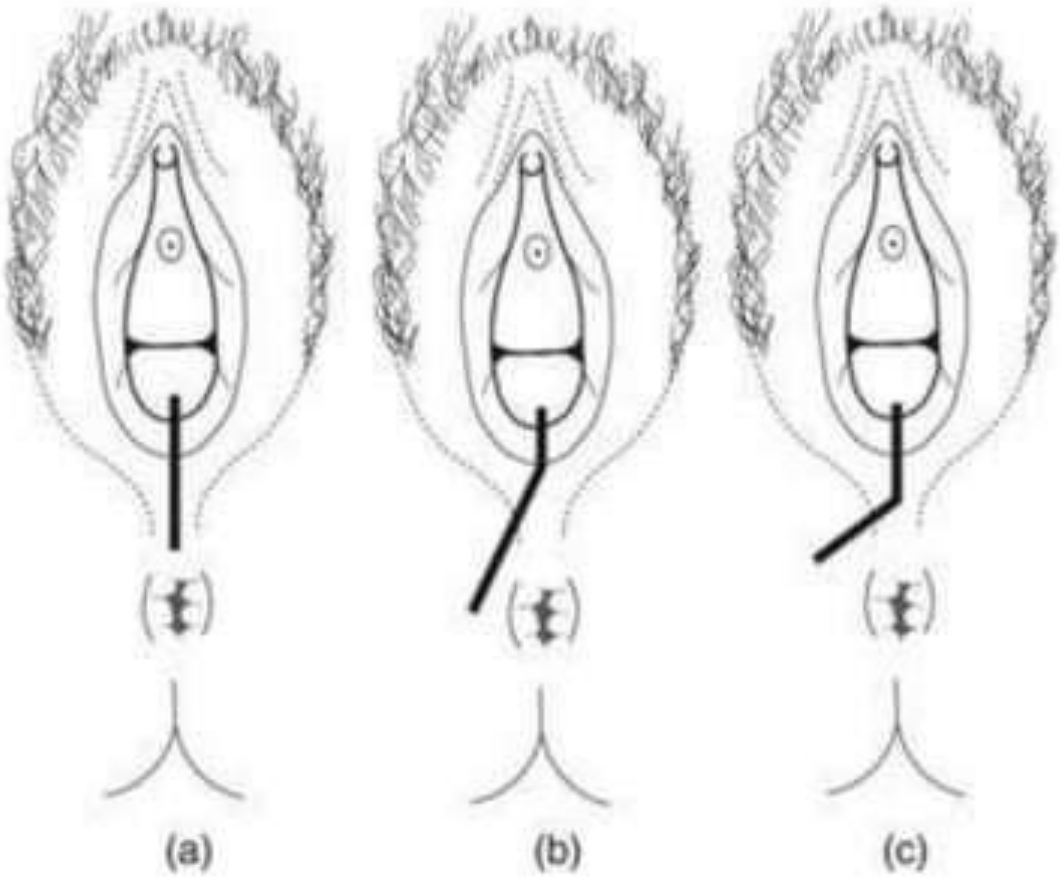
- **'J' SHAPED:**
  The incision begins in the center of the fourchette and is directed posteriorly along the midline for about 1.5 cm and then directed downwards and outwards along 5 or 7 O'clock position to avoid the anal sphincter. Apposition is not perfect and the repaired wound tends to be puckered. This is also not done widely.

Table 37.1: Relative Merits and Demerits of Median and Mediolateral Episiotomy

	Median	Mediolateral
Merits	▪ The muscles are not cut ▪ Blood loss is least ▪ Repair is easy ▪ Postoperative comfort is maximum ▪ Healing is superior ▪ Wound disruption is rare ▪ Dyspareunia is rare	▪ Relative safety from rectal involvement from extension ▪ If necessary, the incision can be extended
Demerits	▪ Extension, if occurs, may involve the rectum ▪ Not suitable for manipulative delivery or in abnormal presentation or position. As such, its use is selective	▪ Apposition of the tissues is not so good ▪ Blood loss is little more ▪ Postoperative discomfort is more ▪ Relative increased incidence of wound disruption ▪ Dyspareunia is comparatively more

TYPES

a) Median
b) Mediolateral
c) 'J' shaped
d) Lateral



STEPS OF MEDIOLATERAL EPISIOTOMY

STEP I

Preliminaries

- The perineum is thoroughly swabbed with antiseptic (povidone-iodine) lotion and draped properly.

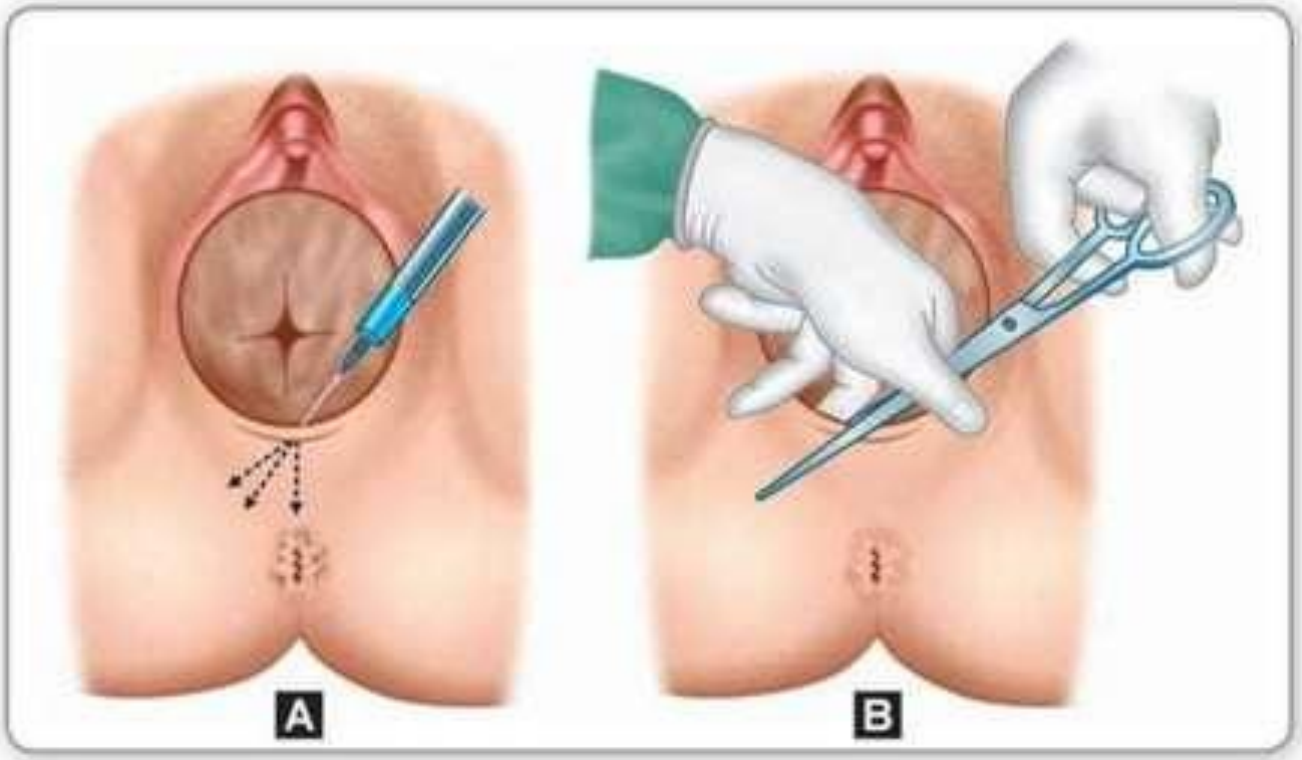
Local anesthesia

- The perineum, in the line of proposed incision is infiltrated with 10 mL of 1% solution of lignocaine

STEP II

1. Incision

2. Two fingers are placed in the vagina between the presenting part and the posterior vaginal wall.
3. The incision is made by a curved or straight blunt pointed sharp scissors (scalpel may also be used)
4. One blade of which is placed inside, in between the fingers and the posterior vaginal wall and the other on the skin.
5. The incision should be made at the height of an uterine contraction when an accurate idea of the extent of incision can be better judged from the stretched perineum.
6. Deliberate cut should be made starting from the center of the fourchette extending laterally either to the right or to the left.
7. It is directed diagonally in a straight line which runs about 2.5 cm away from the anus.
8. The incision ought to be adequate to serve the purpose for which it is needed,
9. The bleeding is usually not sufficient to use artery forceps unless the operation is done too early or the perineum is thick.



Figs 37.4A and B: Steps of mediolateral episiotomy—(A) Perineal infiltration; (B) Cutting the perineum

STRUCTURES CUT ARE

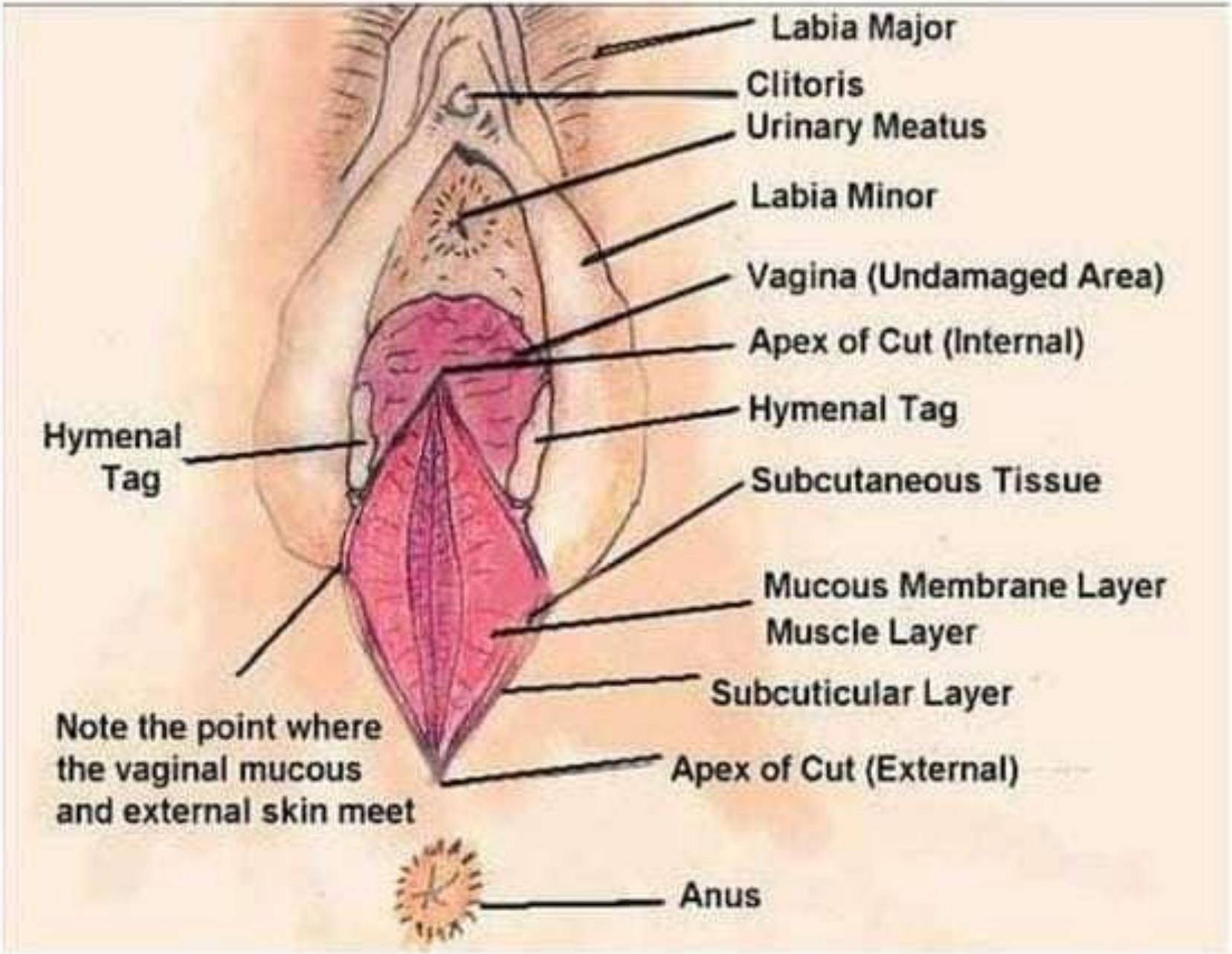
(1) Posterior vaginal wall

(2) Superficial and deep transverse perineal muscles, bulbospongiosus and part of levator ani

(3) Fascia covering those muscles

(4) Transverse perineal branches of pudendal vessels and nerves

(5) Subcutaneous tissue and skin.


Labia Major
Clitoris
Urinary Meatus
Labia Minor
Vagina (Undamaged Area)
Apex of Cut (Internal)
Hymenal Tag
Hymenal Tag
Subcutaneous Tissue
Mucous Membrane Layer
Muscle Layer
Subcuticular Layer
Note the point where the vaginal mucous and external skin meet
Apex of Cut (External)
Anus

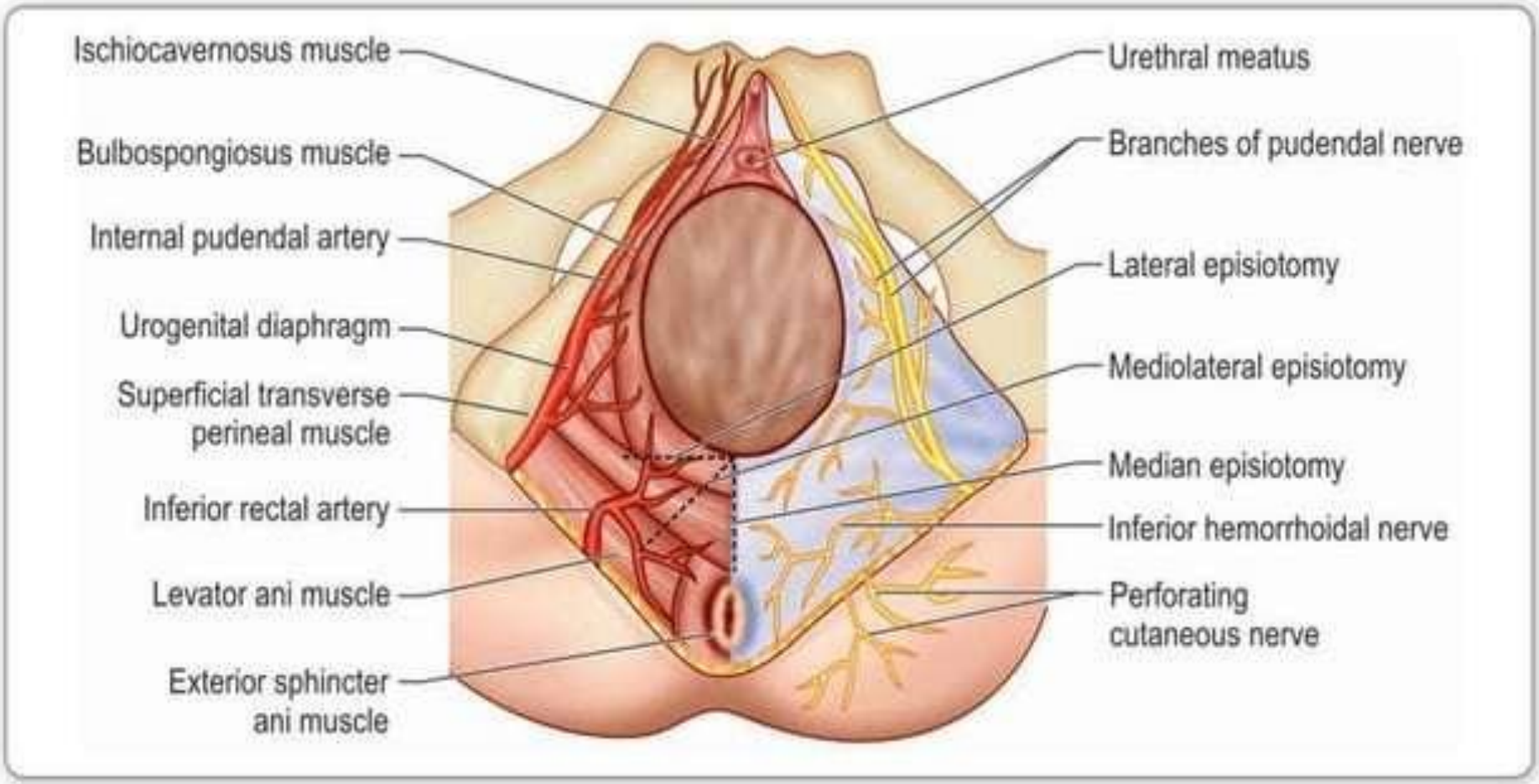


Fig. 37.5: Diagrammatic representation of the structures to be cut in different types of episiotomy

STEP III

Timing of repair

1. The repair is done soon after expulsion of placenta.
2. If repair is done prior to that, disruption of the wound is inevitable, if subsequent manual removal or exploration of the genital tract is needed.
3. Oozing during this period should be controlled by pressure with a sterile gauze swab and bleeding by the artery forceps.
4. Early repair prevents sepsis and eliminates the patient's prolonged apprehension of "stitches".

REPAIR STEPS

Preliminaries

- Lithotomy position.
- A good light source
- Cleansed with antiseptic solution.
- Blood clots are removed from the vagina and the wound area.
- The patient is draped properly and repair should be done under strict aseptic precautions.
- If the repair field is obscured by oozing of blood from above, a vaginal pack may be inserted and is placed high up.

Repair

- Done in three layers.
- The principles to be followed are:

(1) perfect hemostasis

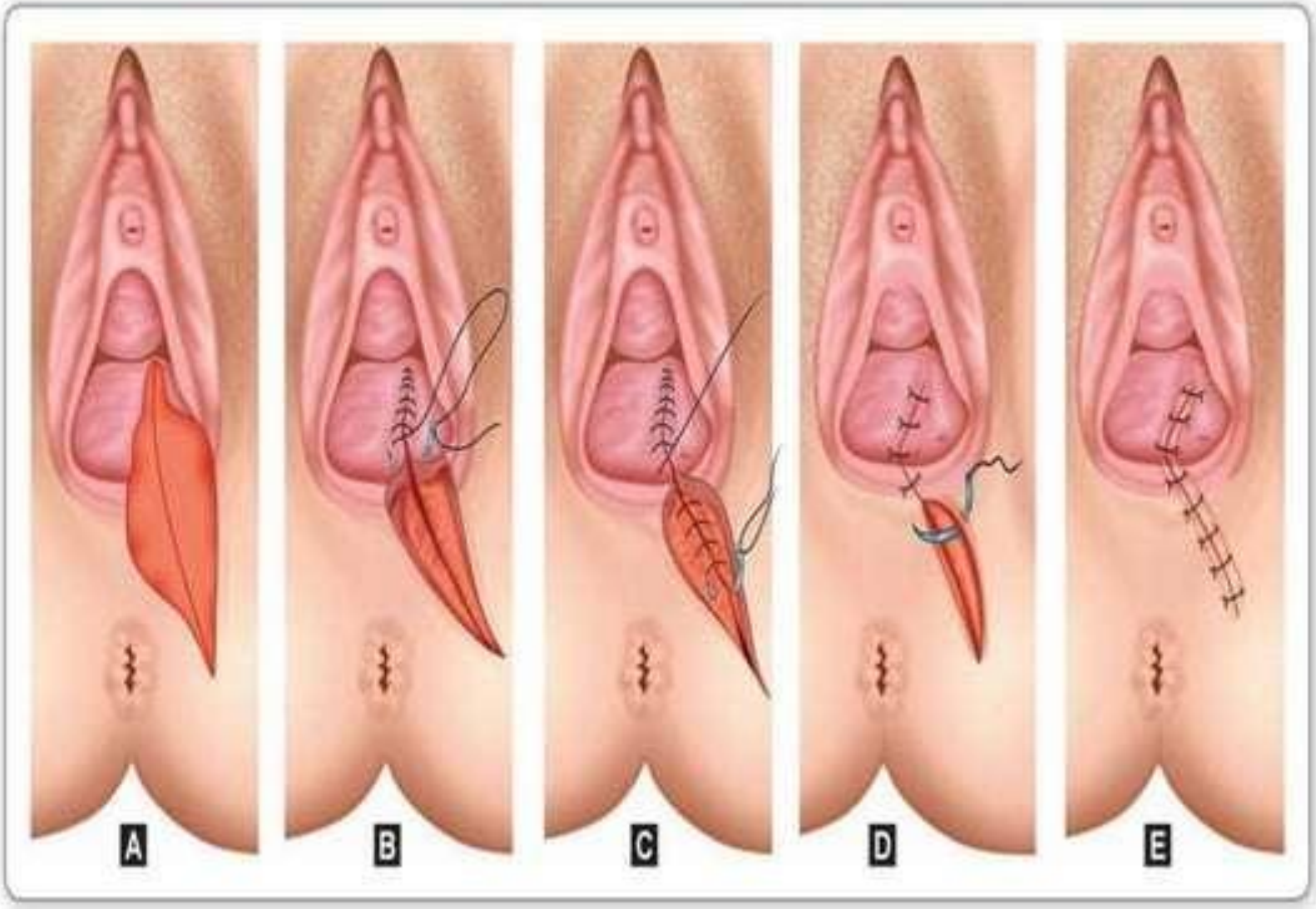
(2) to obliterate the dead space and

(3) suture without tension.

LAYERS

- The repair is to be done in the following order:

(1) Vaginal mucosa and submucosal tissues
(2) Perineal muscles
(3) Skin and subcutaneous



Figs 37.6A to E: Steps of repair of episiotomy—(A) Wound on inspection; (B) Repair of vaginal mucosa; (C) Reapir of perineal muscles by interrupted sutures; (D) Apposition of the skin margins; (E) Repaired wound on inspection

REPAIR STEPS

- The vaginal mucosa is sutured first.
- The first suture is placed at or just above the apex of the tear.
- Thereafter, the vaginal walls are apposed by interrupted sutures with polyglycolic acid suture (Dexon) or No. "0" chromic catgut, from above downwards till the fourchette is reached.
- The suture should include the deep tissues to obliterate the dead space.
- A continuous suture may cause puckering and shortening of the posterior vaginal wall.
- Care should be taken not to injure the rectum.

POSTOPERATIVE CARE

- Dressing
- Comfort
  - MgSo4 compression
  - Infrared heat
  - Ice pack
  - Analgesic (ibuprofen)
- Ambulance
- Removal of stitches
  - Non-absorbable (6^{th} day)

IMMEDIATE COMPLICATIONS

(1) Extension of the incision to involve the rectum.
(2) Vulval hematoma
(3) **Infection**:
    (A) throbbing pain on the perineum
    (B) rise in temperature
    (C) the wound area looks moist, red and swollen and
    (D) offensive discharge

TREATMENT:

(a) To facilitate drainage of pus
(b) Local dressing with antiseptic powder or ointment
(c) $MgSO_4$ compression or application of infrared heat to the area to reduce edema and pain
(d) Systemic antibiotic (IV).

CONT

(4) Wound dehiscence

(5) Injury to anal sphincter causing incontinence of flatus or feces.

(6) Rectovaginal fistula and rarely.

(7) Necrotizing fasciitis (rare) in a woman who is diabetic or immunocompromised

REMOTE COMPLICATION

(1) Dyspareunia

(2) Chance of perineal lacerations in subsequent labor

(3) Scar endometriosis (rare).


Thank you!
grammarly