In The Name Of GOD

TRAUMATIC POSTPARTUM HEMORRHAGE

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- Hemorrhage occuring after delivery of the baby is called postpartum hemorrhage.

- <24 hrs- Primary PPH
- >24 hrs- Secondary PPH

Traumatic PPH

- Due to Maternal Injuries sustained during labour
- **PDF**
- Instrumental delivery
- VBAC
- Face to Pubis delivery
- Precipitate labour
- Macrosomia

Causes

- Perineal tear
- Vulval hematoma
- Laceration of vagina
- Colporrhexis
- Laceration of cervix
- Rupture of Uterus

Diagnosis

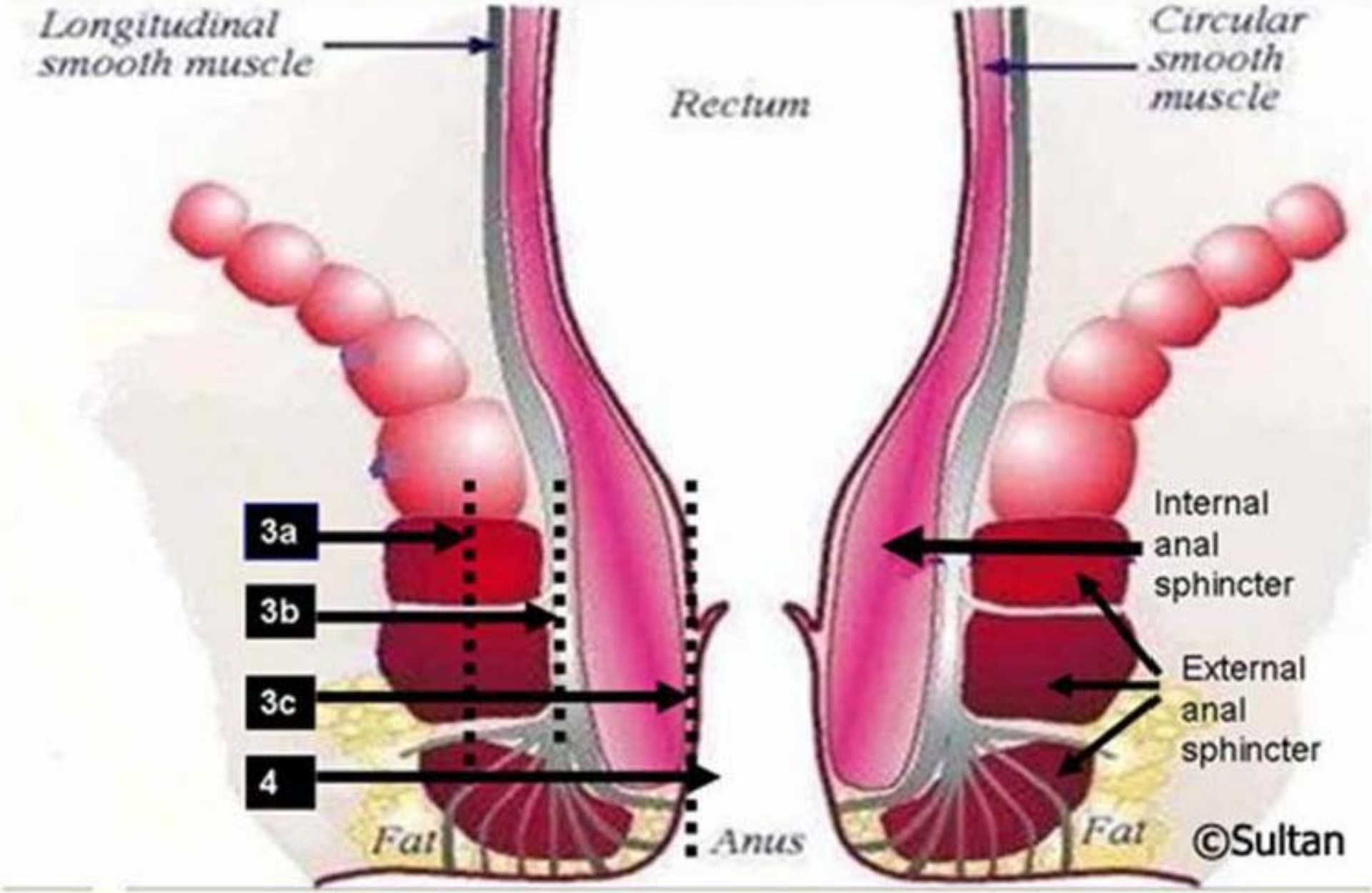
- Speculum Examination

Perineal Tear

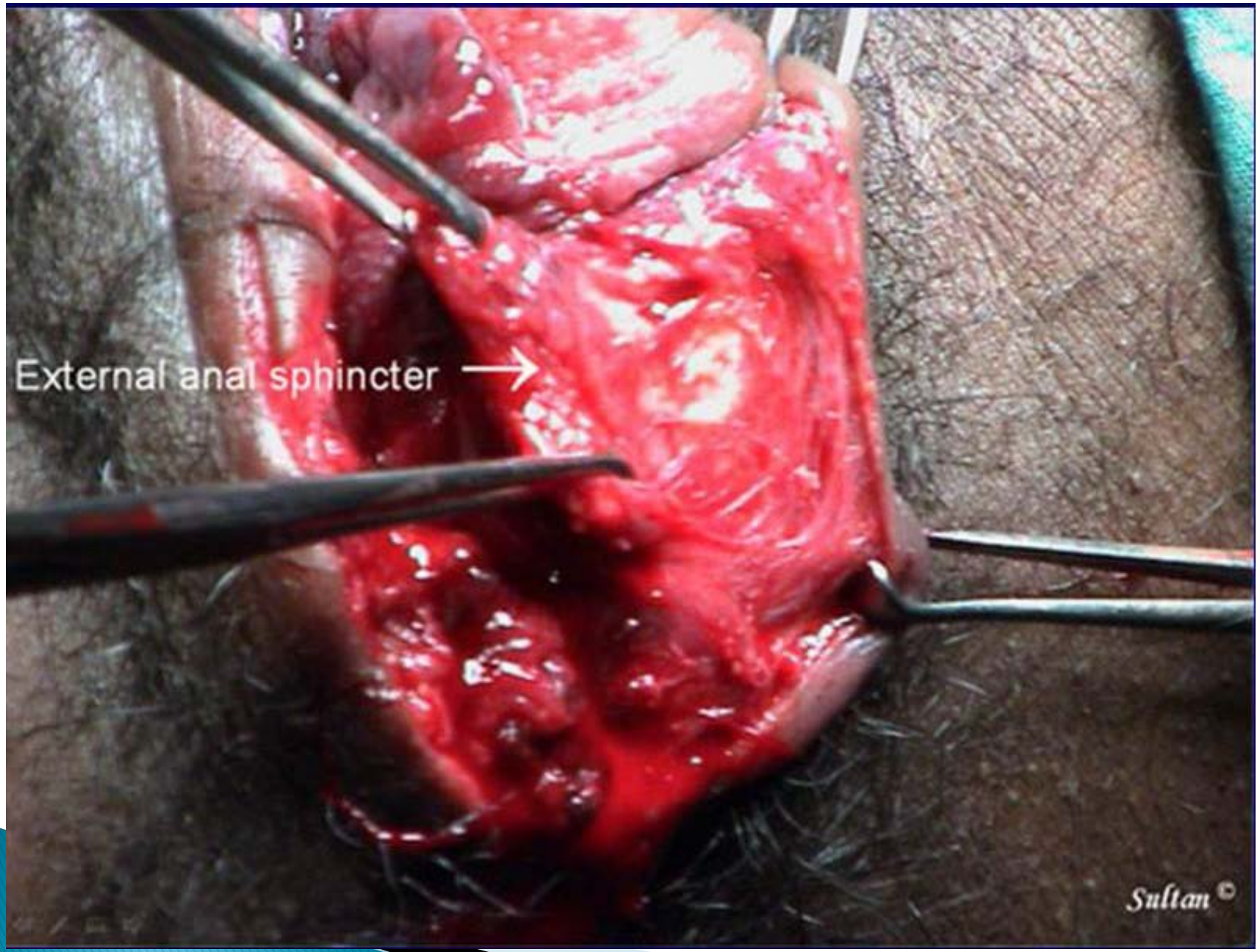
- Etiology
- Narrow sub pubic angle and outlet contraction of pelvis
- Rapid delivery of head or shoulder – spontaneous or assisted
- Rigid perinium
- Cicatrisation
- New growth

- Degrees of perineal tear
- First degree –laceration of vaginal mucosa + perineal skin
- Second degree – First degree + fascia and muscles of perineal body
- Third degree – Second degree + Anal sphincter
- Fourth degree – Third degree + Rectal mucosa

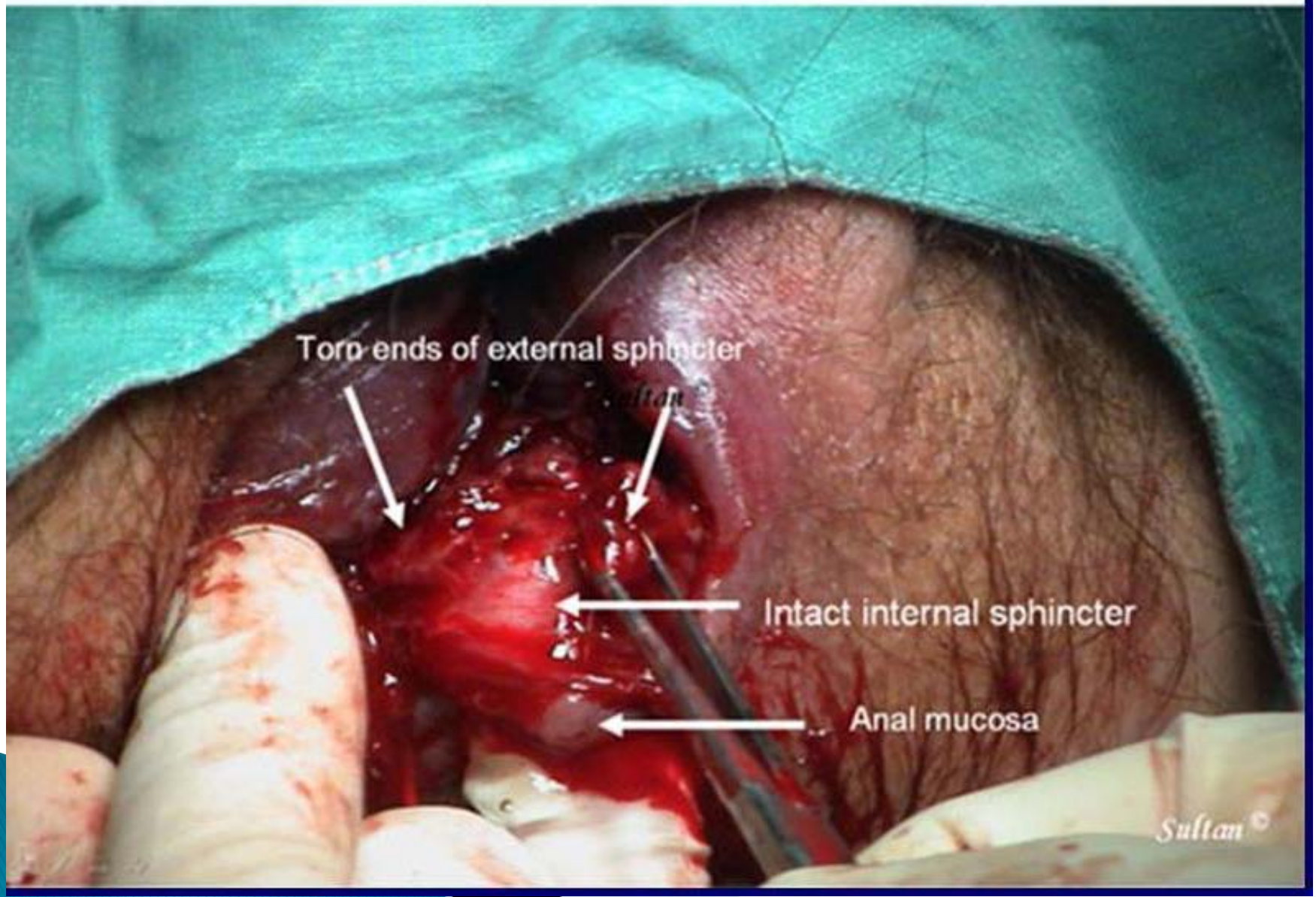
Classification of 3rd / 4th degree tears

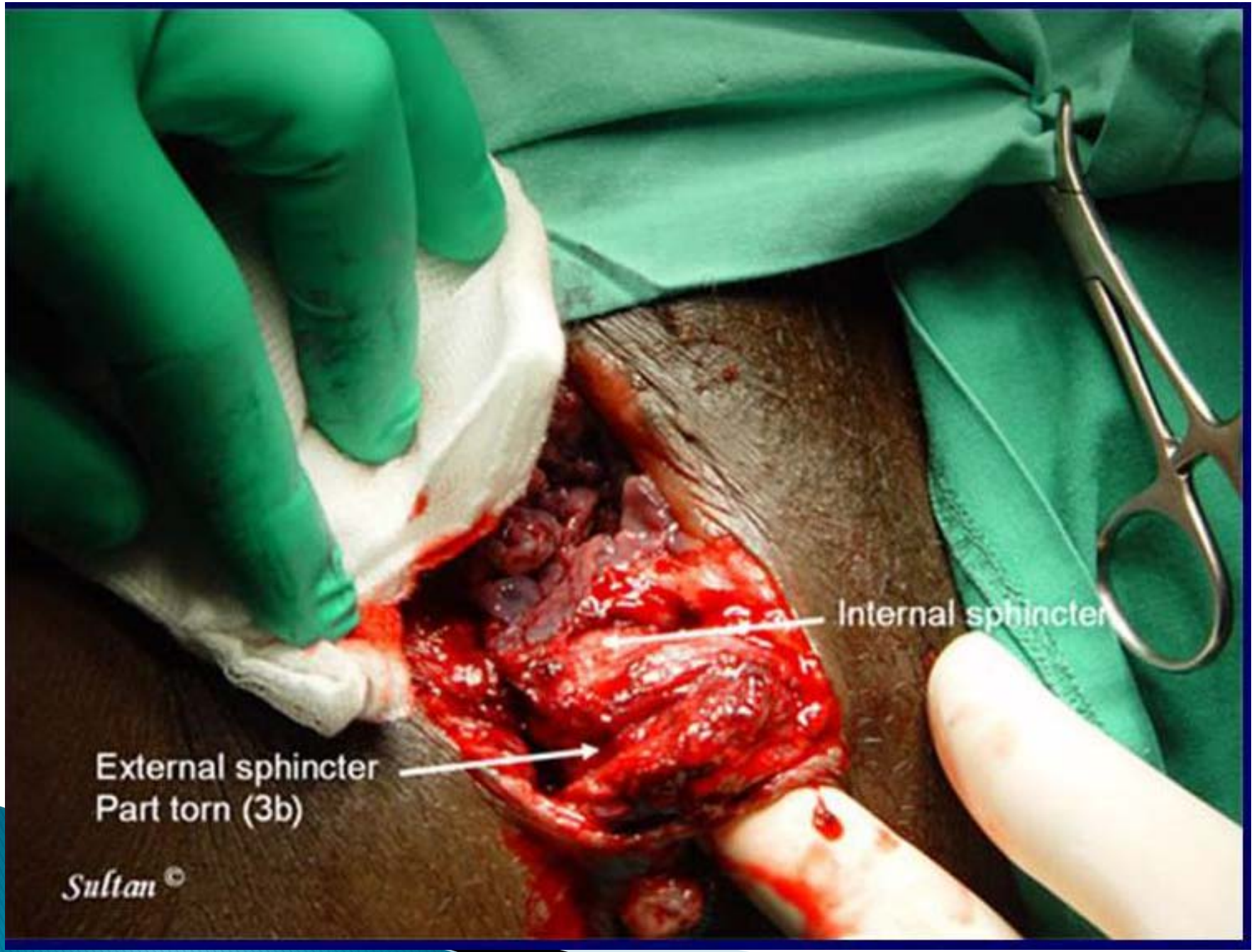


Confirming a tear by palpating the sphincter between the index finger in the anus and the thumb over the vaginal tear ("pill rolling" action)


External anal sphincter
Sultan ©

Third degree tear (Grade 3b)

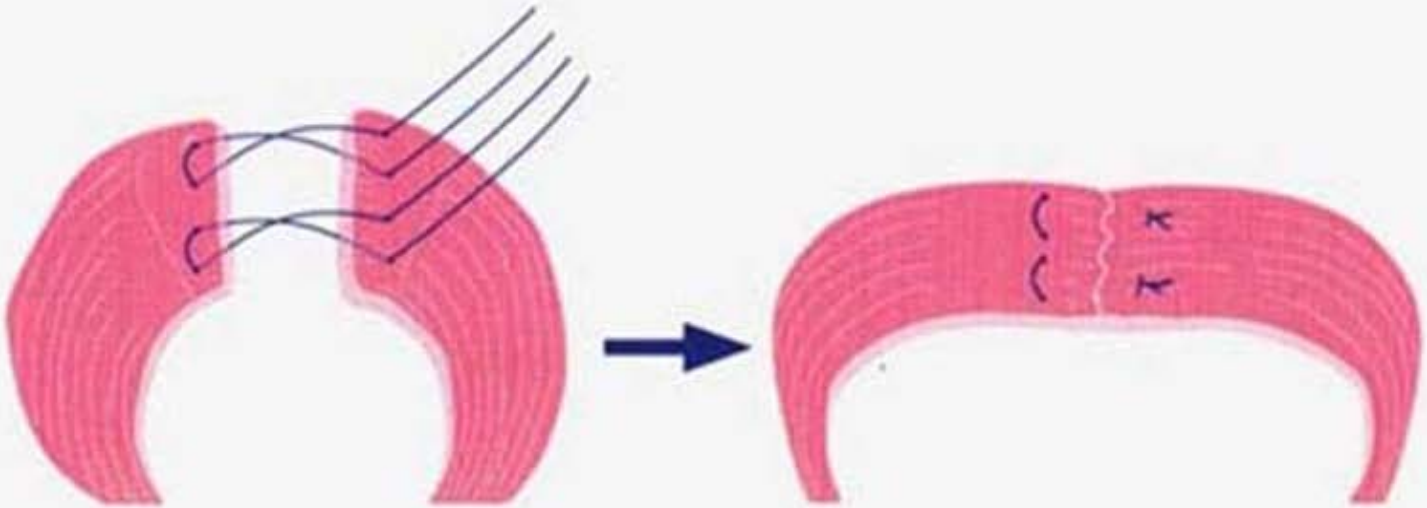



Internal sphincter
External sphincter
Part torn (3b)
Sultan ©

End-to-end primary anal sphincter repair

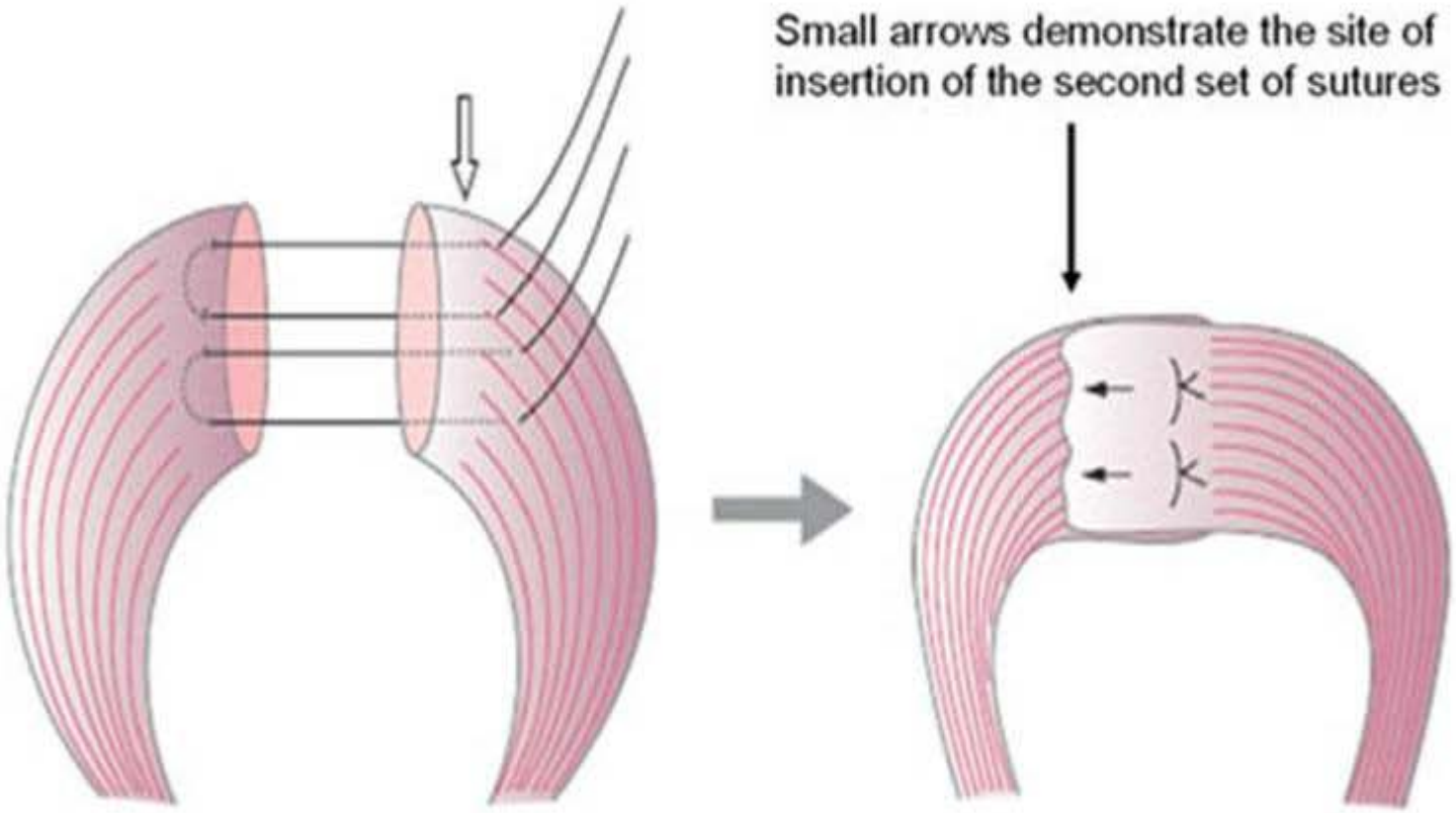
using figure-of-eight sutures

Sultan AH et al 1999 (BJOG)



Primary overlap anal sphincter repair

Sultan AH 2006 (redrawn from Sultan et al 1999)



PROPHYLAXIS

- Episiotomy
- Perineal support

TREATMENT

- All tears of perineum must be carefully sutured
- Lithotomy,good lighting,good analgesia

Repair of first and second degree tear

- Vaginal laceration repaired with 2.0 cat gut.Perineal muscles approximated with interrupted sutures,finally the perineal skin

Repair of Third & Fourth Degree Tear

- Rectal Mucosa 1st repaired with interrupted sutures with 3.0 Vicryl
- Disrupted end of anal sphincter approximated with synthetic suture material
- Remaining as for 2nd degree tear

- **AFTER CARE**
  - Bowel rest
  - Liquid diet for 1st 2 days
  - Light diet for next few days
  - Laxatives for 1 week
  - Prophylactic Antibiotic

FOLLOW UP

- During routine postnatal checkup 6 weeks post delivery
- History regarding bowel function
- Assess healing and Sphincter tone

Complication

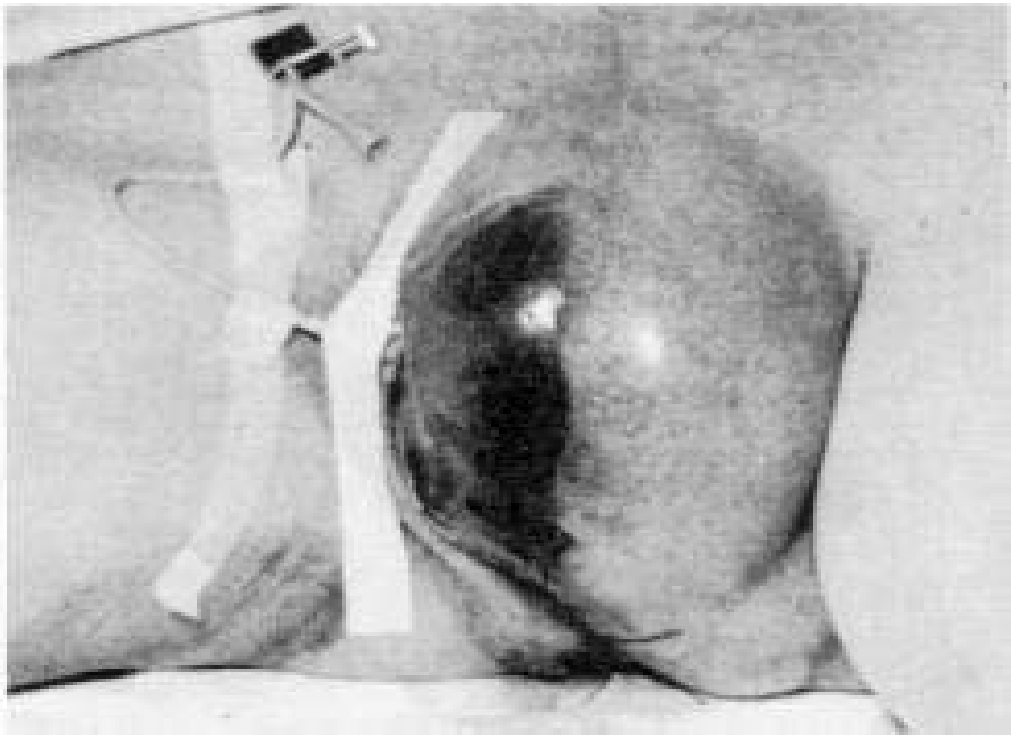
- Wound break down
- Rectovaginal fistula

Vulval Hematoma

- Collection of blood with a vulval swelling on one side due to bleeding from branches of pudendal arteries or paravaginal veins

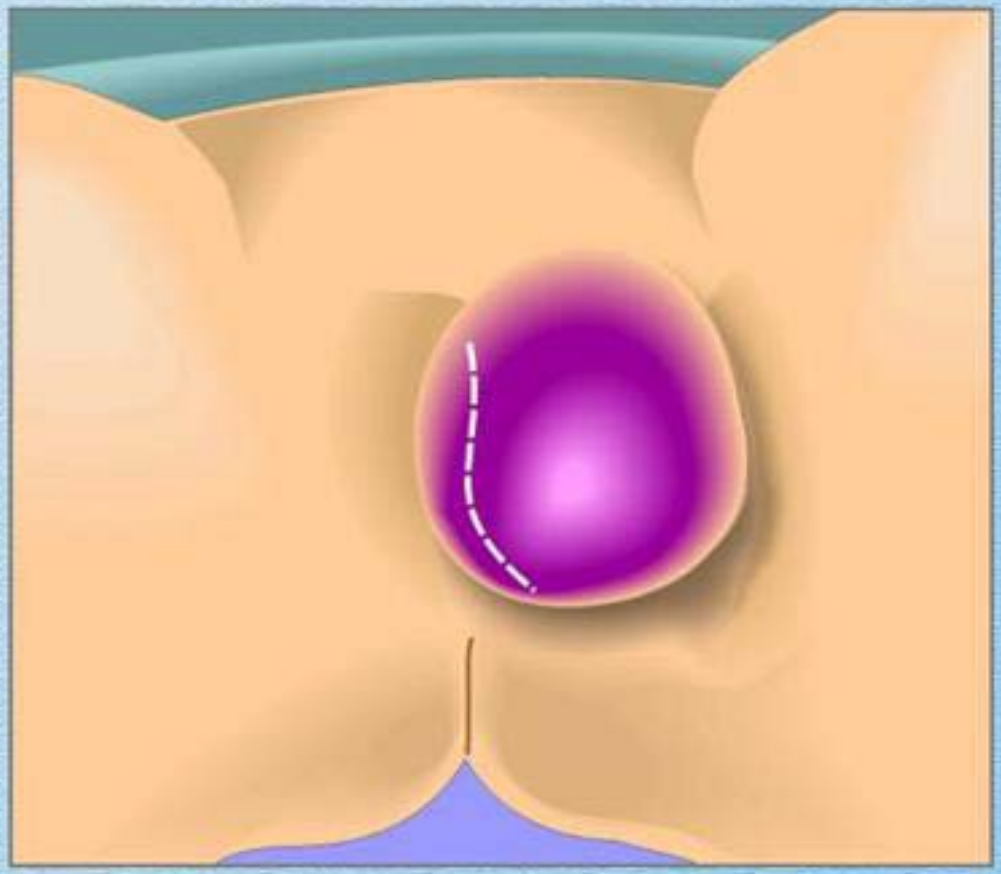
- C/F
  - Severe pain
  - Tense fluctuant swelling
  - Inability to void

Birth Trauma
Vulvar hematoma



Hematomas less than 3cm in diameter can be observed expectantly.
If larger, incision and evacuation of clot is necessary.
Irrigate and ligate bleeding vessels.
With diffuse oozing, perform layered closure to eliminate dead space.
Consider prophylactic antibiotics.

Vulvar Hematoma



Treatment

- Under GA hematoma is laid open
- Clots removed
- Hemostasis achieved
- Sutures put to close cavity

Laceration of vagina

- Lower third of vagina assoc with perineal tear
- Repaired with perineal tear

- Upper and midvaginal laceration common in instrumental deliveries
- Slight laceration left untreated
- Extensive Sutured

Vaginal hematomas

- **Vaginal hematomas should not be drained unless expanding.**
- Attempts at operative drainage can result in significant additional blood loss because it is often difficult to identify and ligate bleeding vessels in a fresh vaginal sulcus hematoma.
- **A stable hematoma may be drained later if it becomes infected or pain is not relieved adequately with analgesics.**
- Continuous expansion of a hematoma leading to hypovolemia may necessitate drainage and packing.
- **Alternatively, embolization may be the best approach.**

Calporrhexis

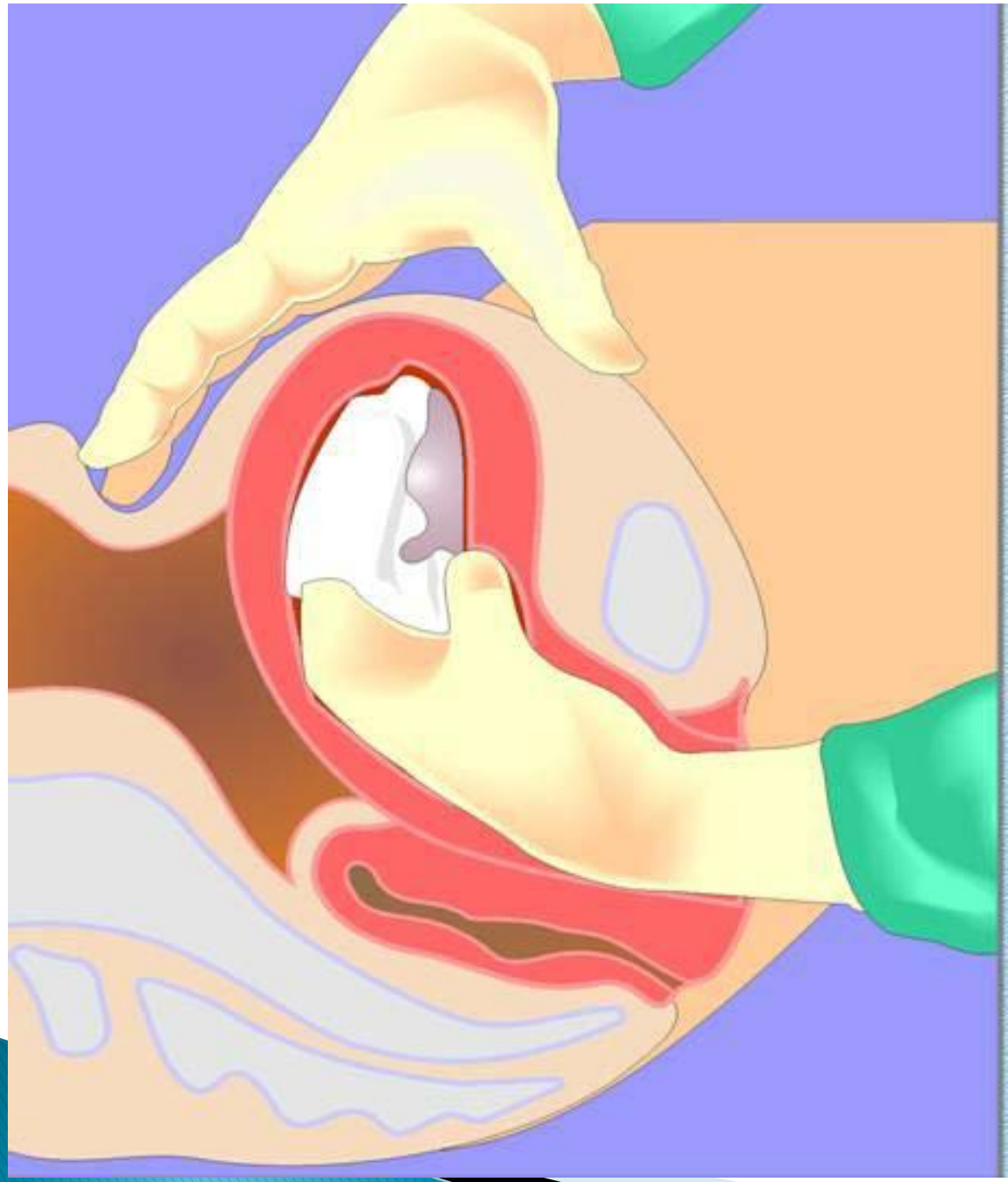
- Rupture of vaginal Vault
- Usually occuring in multipara during N labour

- Rx
  - Immediate laparotomy & hysterectomy

Laceration of Cervix

- Causes
  - rapid delivery of fetus when cervix is not completely dilated
  - Rigidity of cervix

- Rx
  - Minor- None specific
  - Major- Require suturing

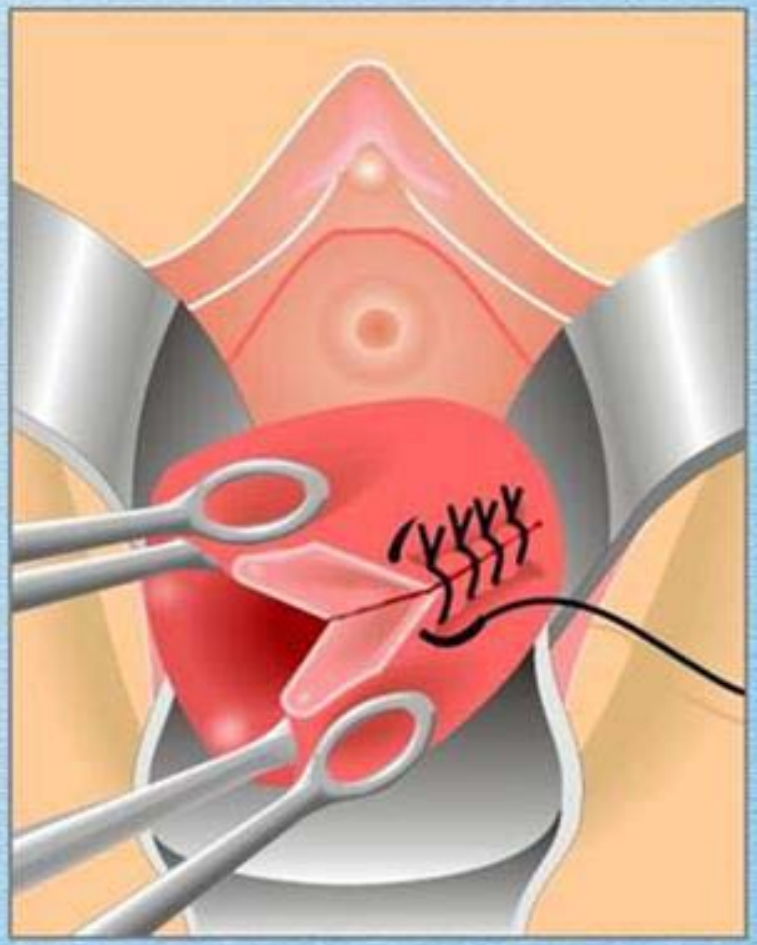


Manual Extraction

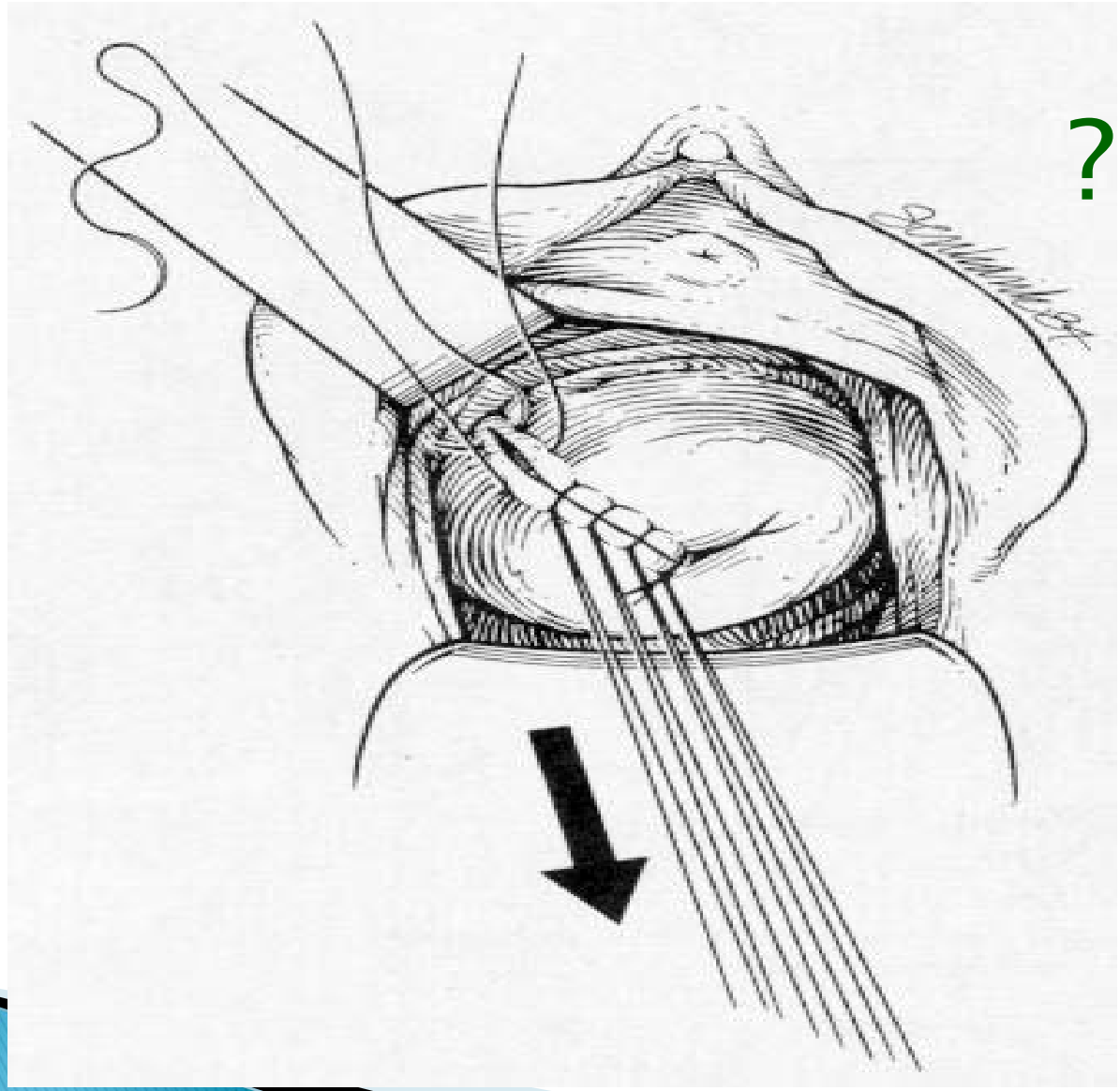
Digital exploration of the uterus

Removal of retained membranes and placental fragments

Cervical Laceration



Repair of cervical laceration



Repair of cervical tears

- If the apex is difficult to reach and ligate, it may be possible to grasp it with artery or ring forceps.
- Leave the forceps in place for 4 hours.
- Do not persist in attempts to ligate the bleeding points as such attempts may increase the bleeding.
- Then:
- – After 4 hours, open the forceps partially but do not remove;
- – After another 4 hours, remove the forceps completely.
- A laparotomy may be required to repair a cervical tear that has extended deep beyond the vaginal vault.
- Sutures should not be placed cephalad to the fornix, as this can result in ureteral ligation.

Rupture of Uterus

- Complete- 3 coats of uterus + peritoneum
- Incomplete peritoneal covering intact

Classifications of uterine rupture

Complete rupture involves rupture of visceral peritoneum and results in intraperitoneal bleeding.

Incomplete rupture occurs when the visceral peritoneum remains intact over ruptured myometrium.

CAUSES

Previous surgeries on uterus
Obstructed labour
External cephalic presentation
Operative vaginal delivery
Trauma by currete or sound
Use of oxytotics
High parity
Pregnancy in undeveloped uterine horn

Uterine Rupture

- Rare: 0.04% of deliveries.
- Risk factors include:
- Prior C/S: up to 1.7% of these deliveries.
- Prior uterine surgery.
- Hyperstimulation with oxytocin.
- Trauma.
- Parity > 4.
- Placental abruption.
- Forceps delivery (especially mid forceps).
- Breech version or extraction.

- CLINICAL FEATURES
- Abdominal pain
- Vaginal bleeding
- Fetal heart rate abnormality
- Easy palpation of fetal parts P/A
- Presenting part recedes
- Shifting dullness
- Hypovolemic shock
- Shoulder tip pain

Uterine Rupture

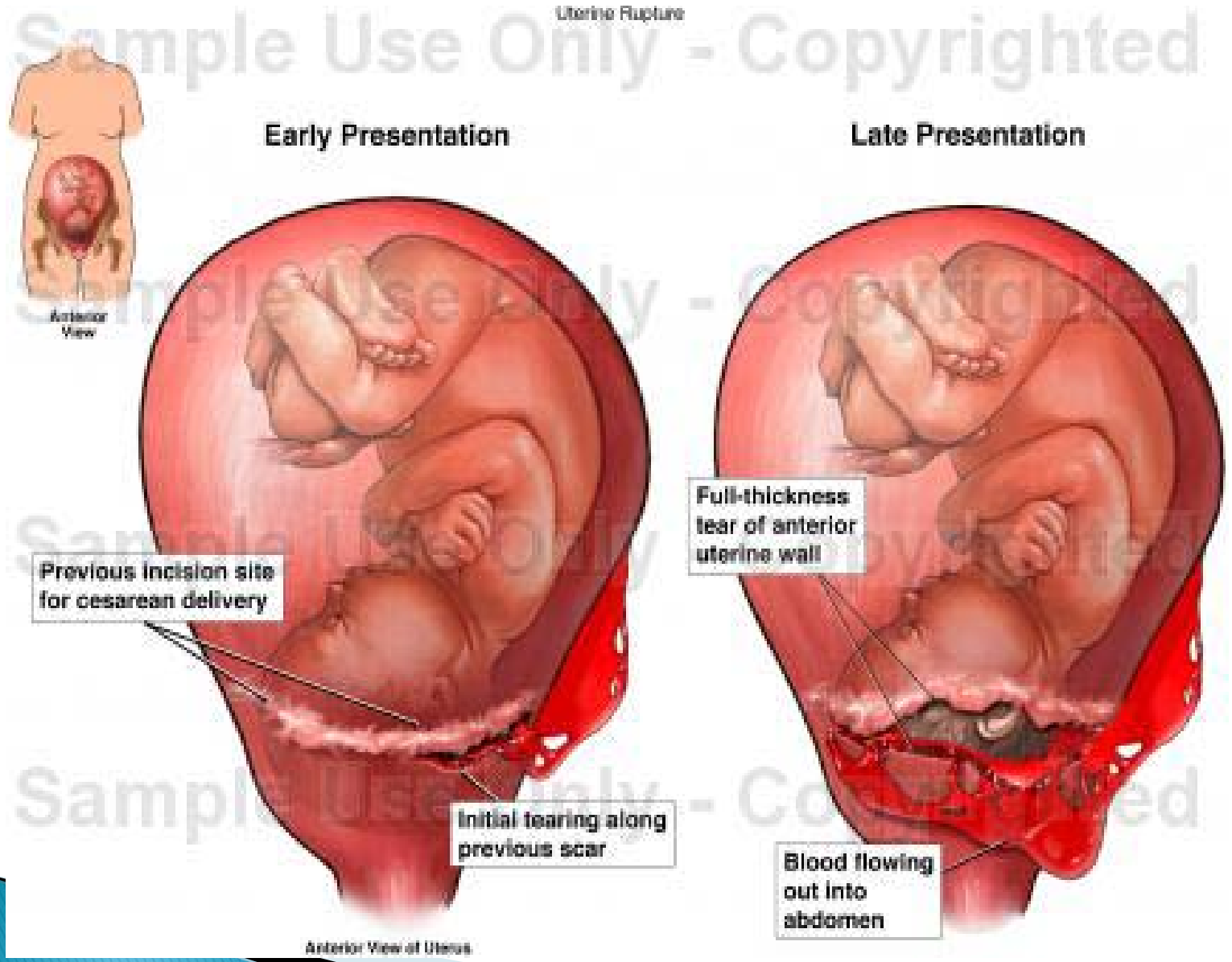
Clinical Manifestations

- Tachycardia
- Shock
- Fetal distress
- Disappearance of presenting part from the pelvis
- Variable amount of pain and vaginal bleeding.

- PROPHYLAXIS
- Early diagnosis and proper Mx of CPD malpresentation and other factors giving rise to obstruction

- MANAGEMENT
- Immediate laprotomy and removal of fetus and placenta
- Rx shock and haemorrhage
- Broad spectrum antibiotics
- Hysterectomy-if damaged beyond salvage/pt not keen on uterine preservation
- Conservative surgery-if pt wishes to retain uterus/pt GC stable

- Techniques used to control blleding at laprotomy include
- Oxytotics
- Figure of eight stiches at placental bed
- Uterine/ovarian/internal illiac artery ligation



Uterine Rupture

- ✓ Sometimes found incidentally.
- ✓ During routine exam of uterus.
- ✓ Small dehiscence, less than 2cm.
- Not bleeding.
- Not painful
- Can be followed expectantly.


Thank you for
saving my MOM