EPISIOTOMY

M.Hajhashemy

- 1- کدام عضلات هنگام اپیزیوتومی بریده میشوند؟

الف: بولبو کاورنوس

ب: لواتور آنی

ج: ایسکیو کاورنوس

- 2- بیشترین سهم تون رست آنوس مربوط به کدام عضله است؟

الف: لواتور آنی

ب: اسفنگتر داخلی

ج: اسفنگتر خارجی

- 3- در سونو اندو آنال در نمای تحتانی آنوس کدام عضله دیده میشود؟

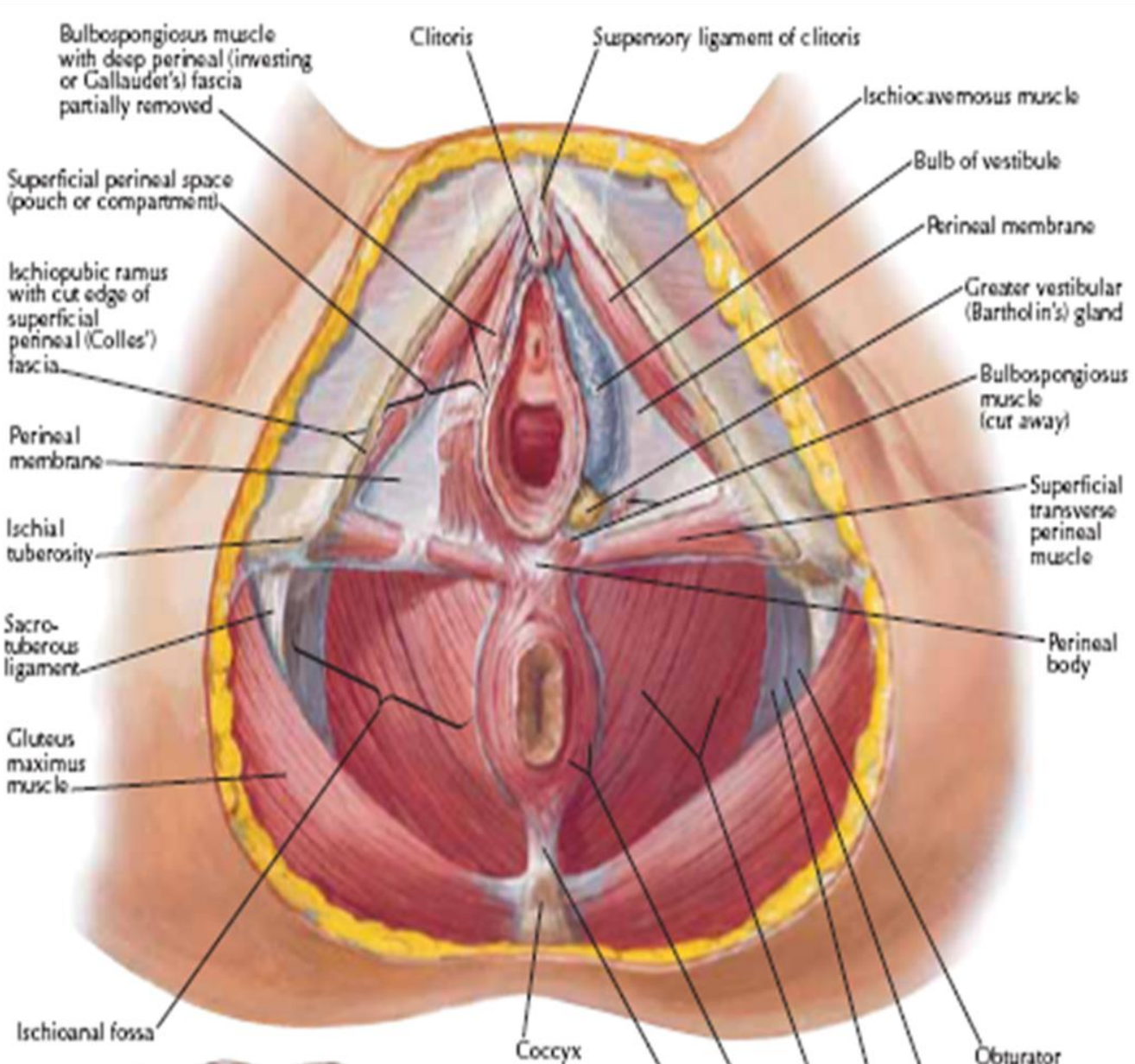
الف: لواتور آنی

ب: اسفنگتر خارجی

ج: اسفنگتر داخلی

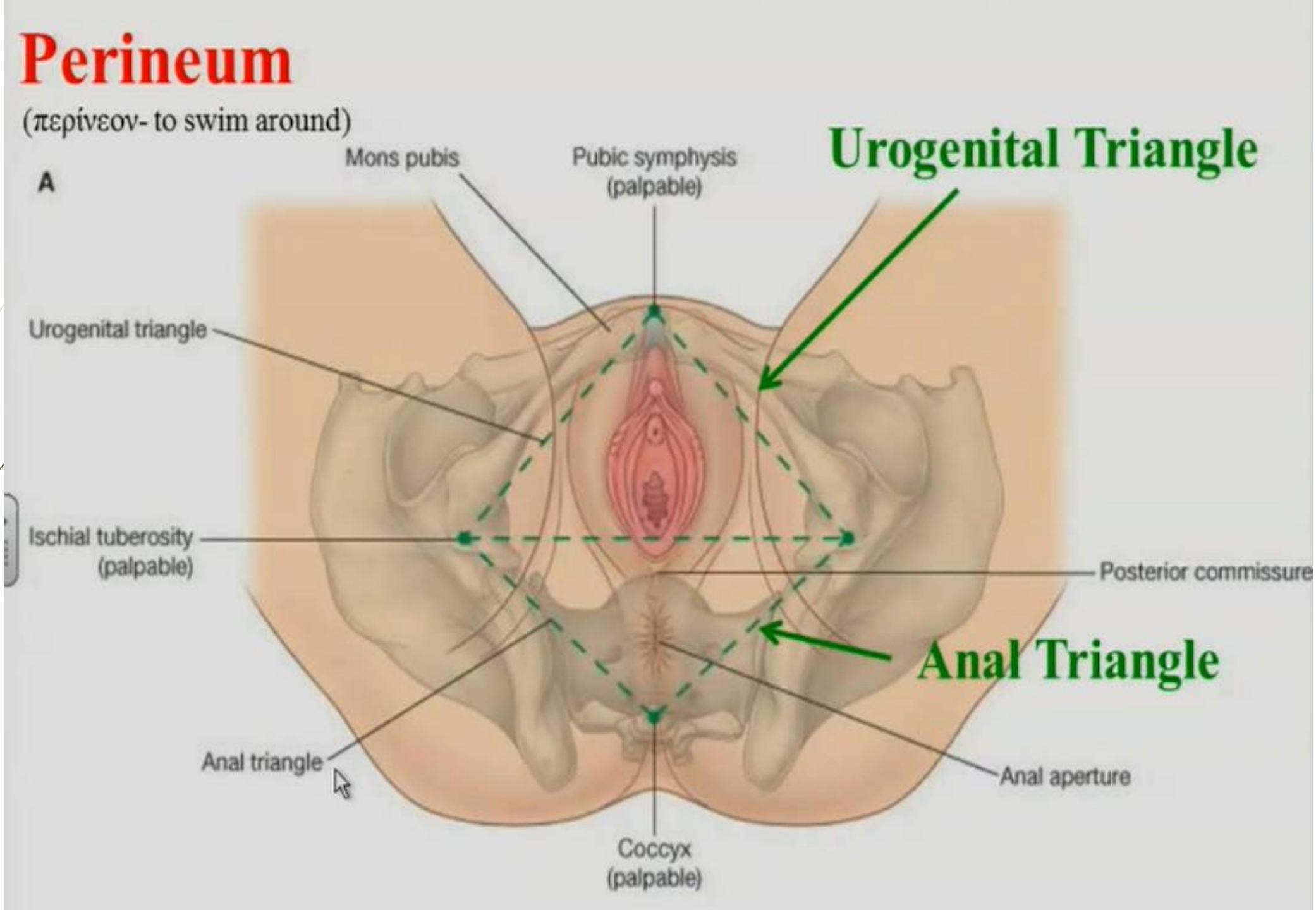
Perineum

- Anteriorly: pubic arch
- posteriorly : coccyx
- laterally: ischiopubic rami, ischial tuberosities, sacrotuberous ligaments.
- Superficial: skin
- Transverse line between the ischial tuberositys



Perineum

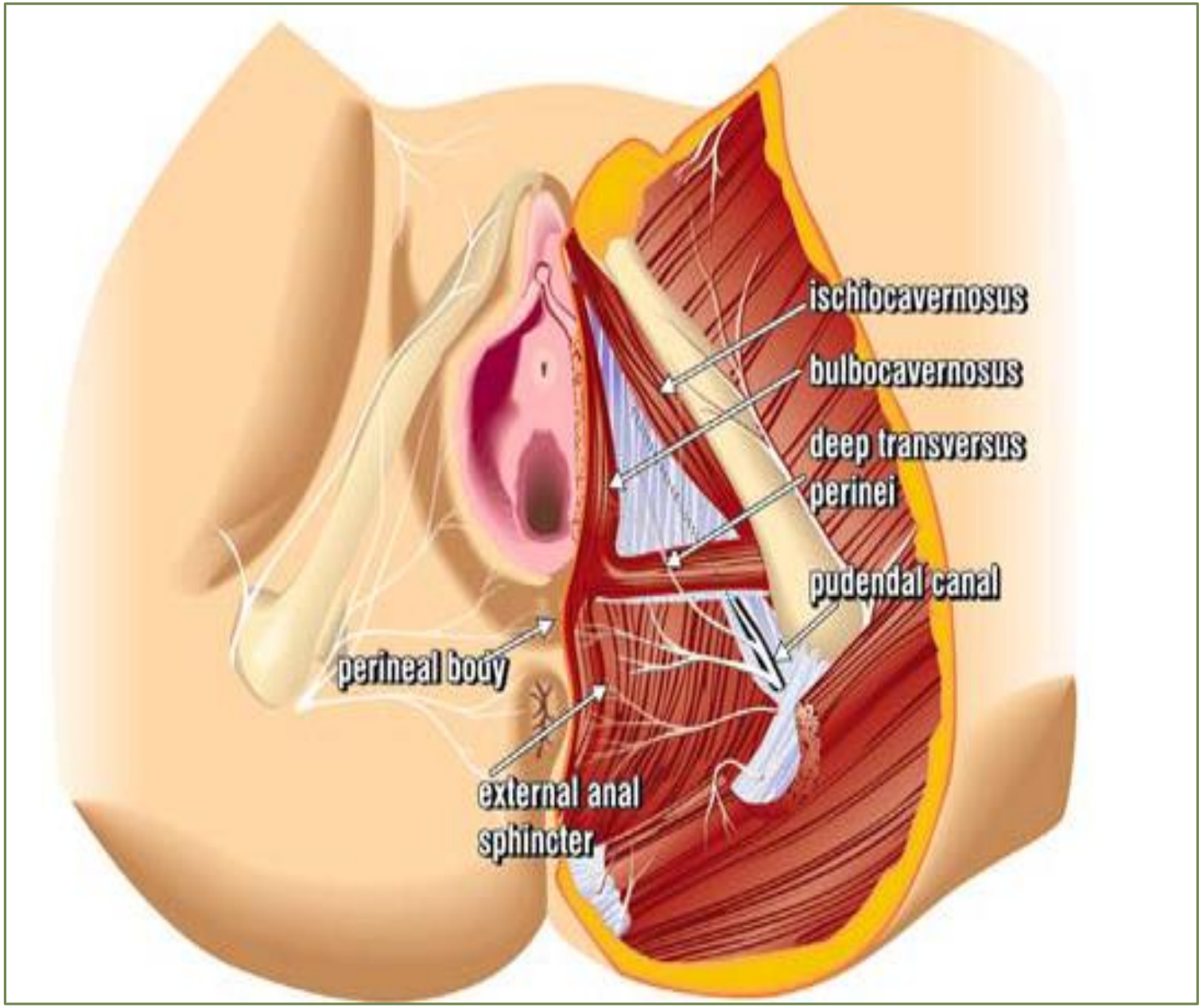
(περίνεον- to swim around)

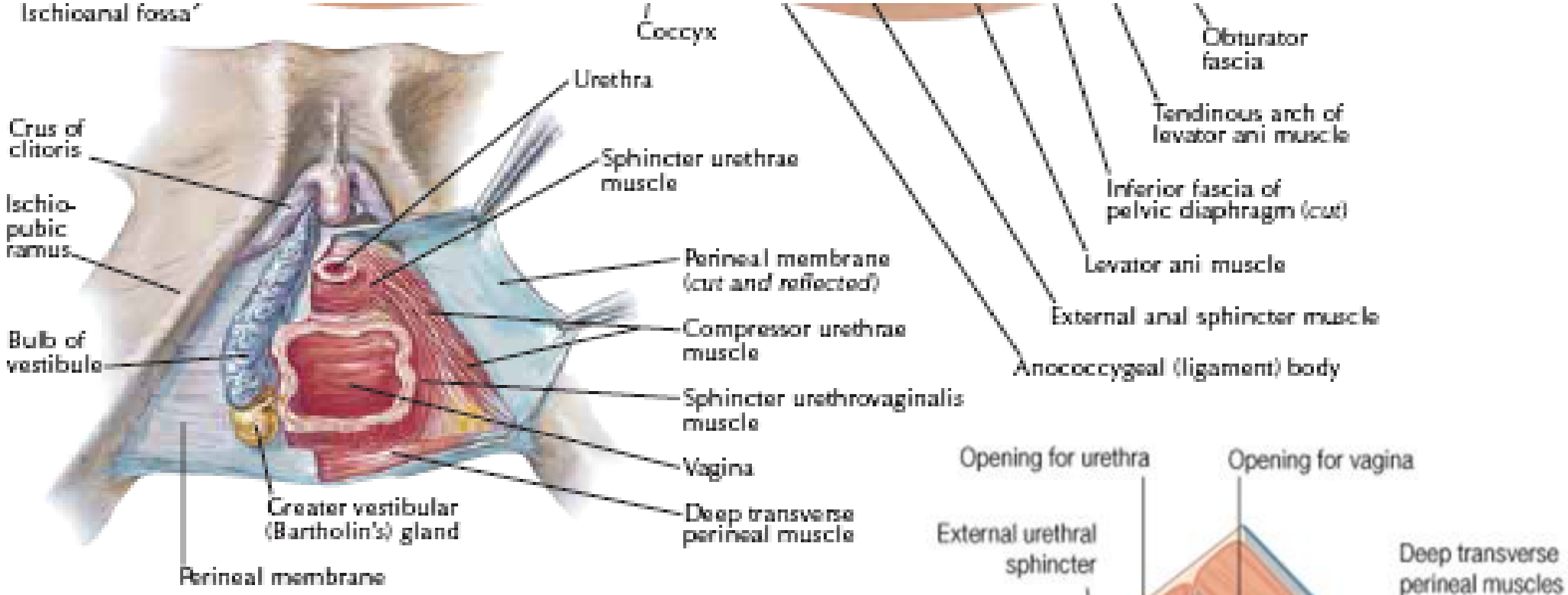


telindes

- Skin
- Subcutaneous tissue
  - Camper's fascia
  - Colles fascia
- Superficial space
  - Clitoris and its crura
  - Ischiocavernous muscle
  - Vestibular bulb
  - Bulbocavernous muscle
  - Greater vestibular gland
  - Superficial transverse perineal muscle
- Deep space-perineal membrane
  - Compressor urethrae
  - Urethrovaginal sphincter

The Urogenital Triangle





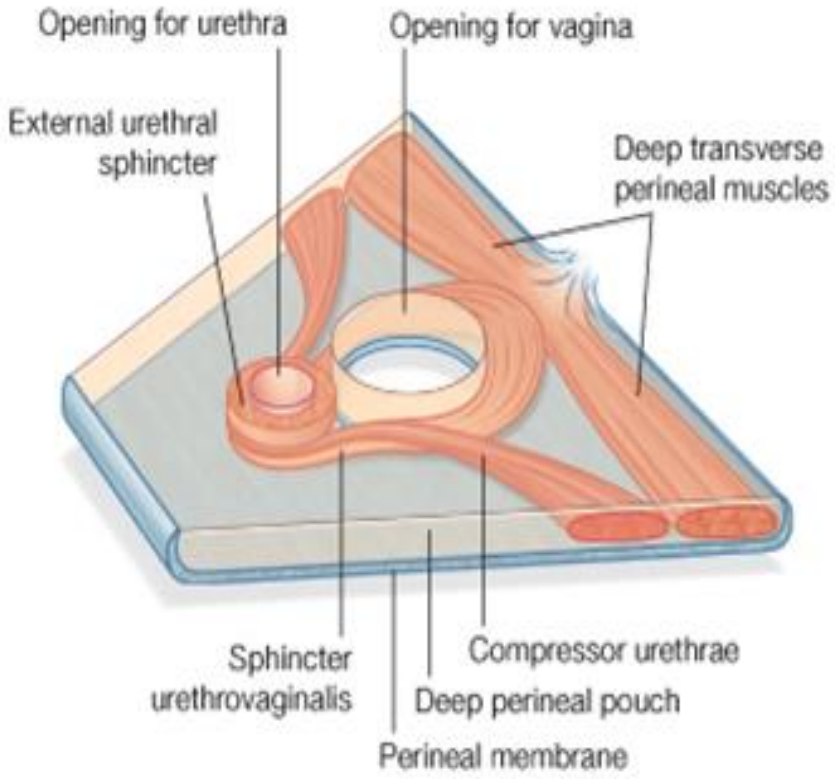


Fig. 3. Muscle and fascial supports of the perineum. (Netter RH. Atlas of human anatomy. 4th ed. Philadelphia [PA]: Saunders Elsevier; 2006. Netter illustrations used with permission of Elsevier Inc. All rights reserved.)

Superficial Transverse Perineal Muscle

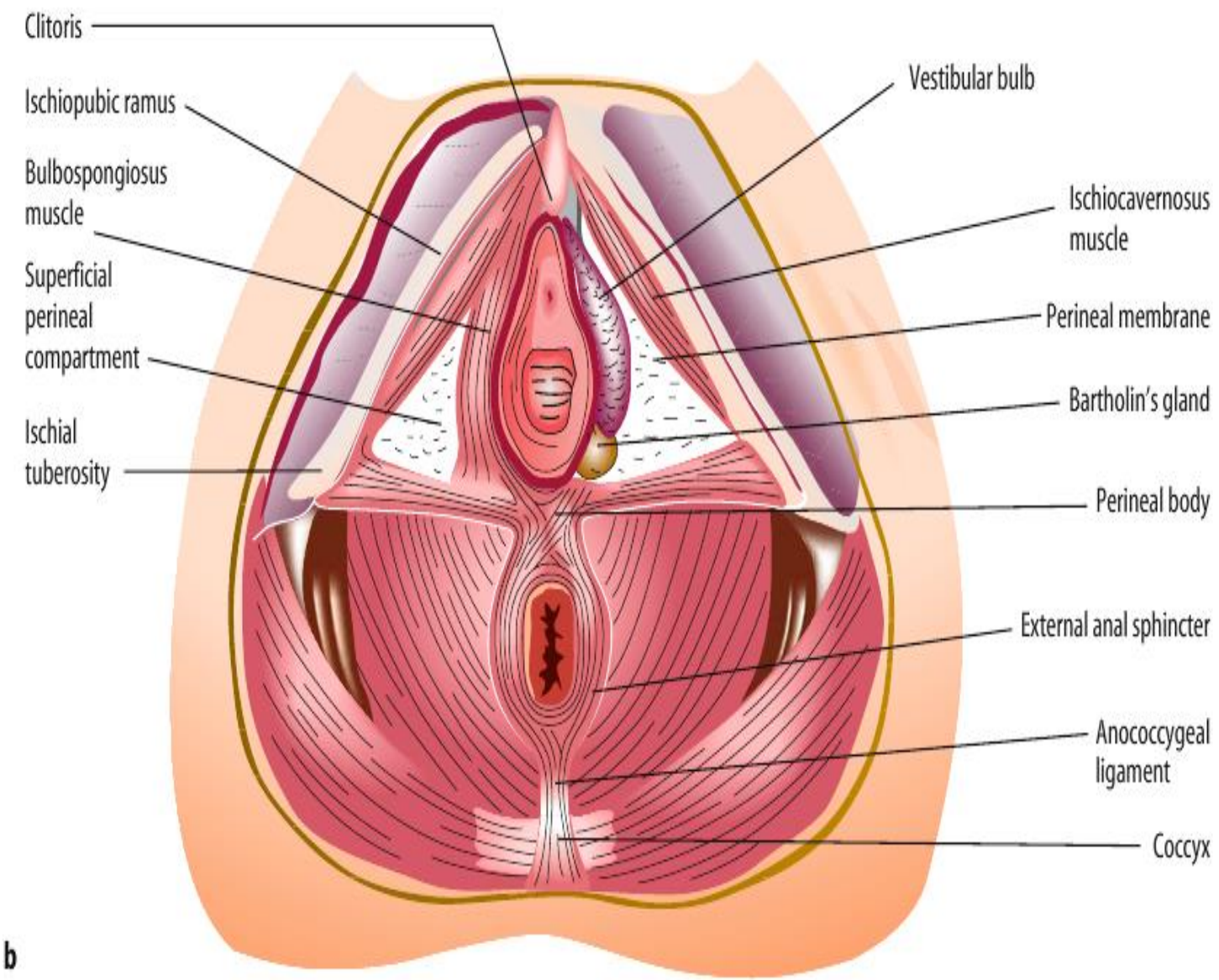
- From the inner and forepart of the ischial tuberosity
- Inserted into

  -Central tendinous part of the perineal body

  -The muscle from the opposite side,

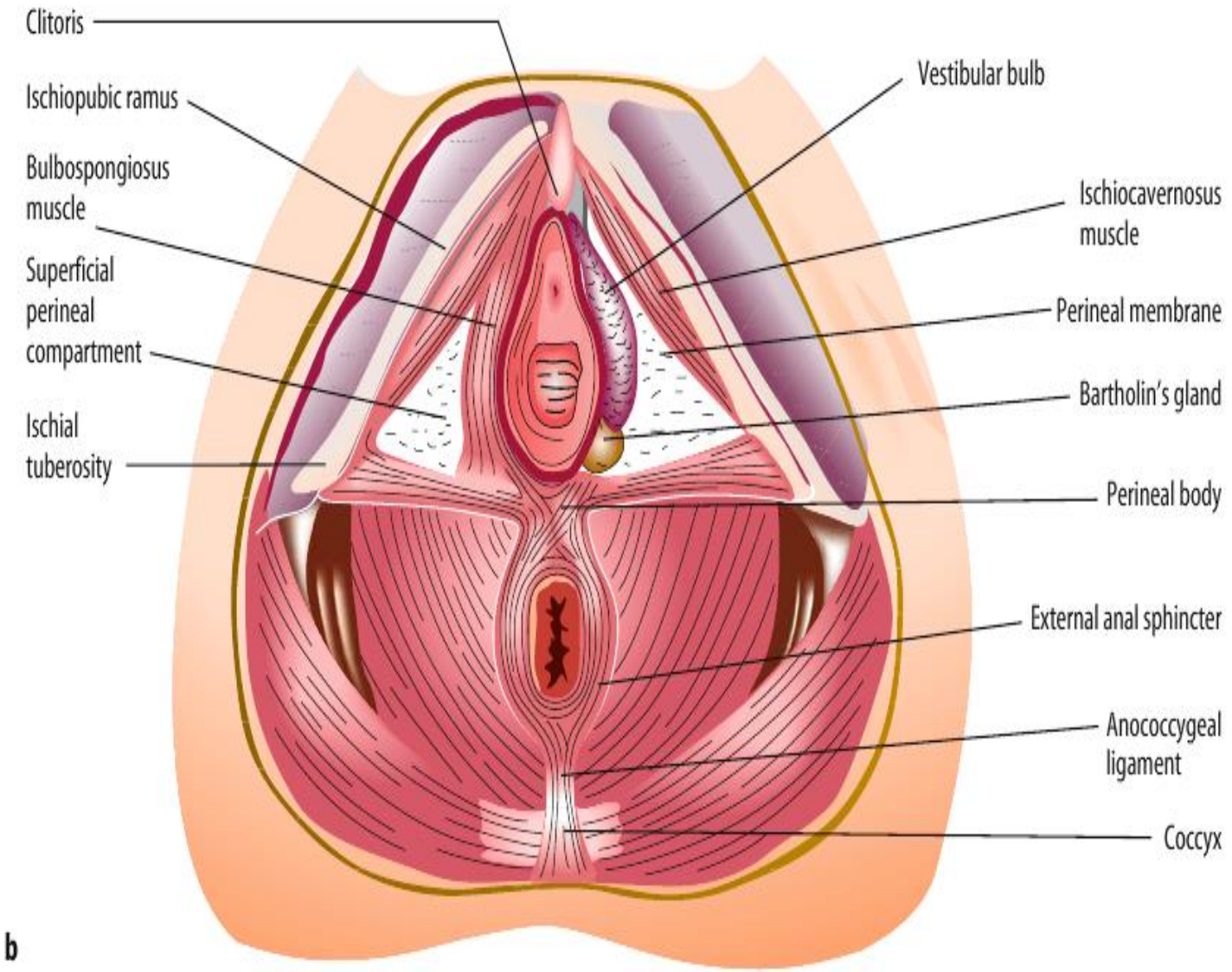
  -The EAS from behind

  -The bulbospongiosus in the front
- all attach to the central tendon of the perineal body



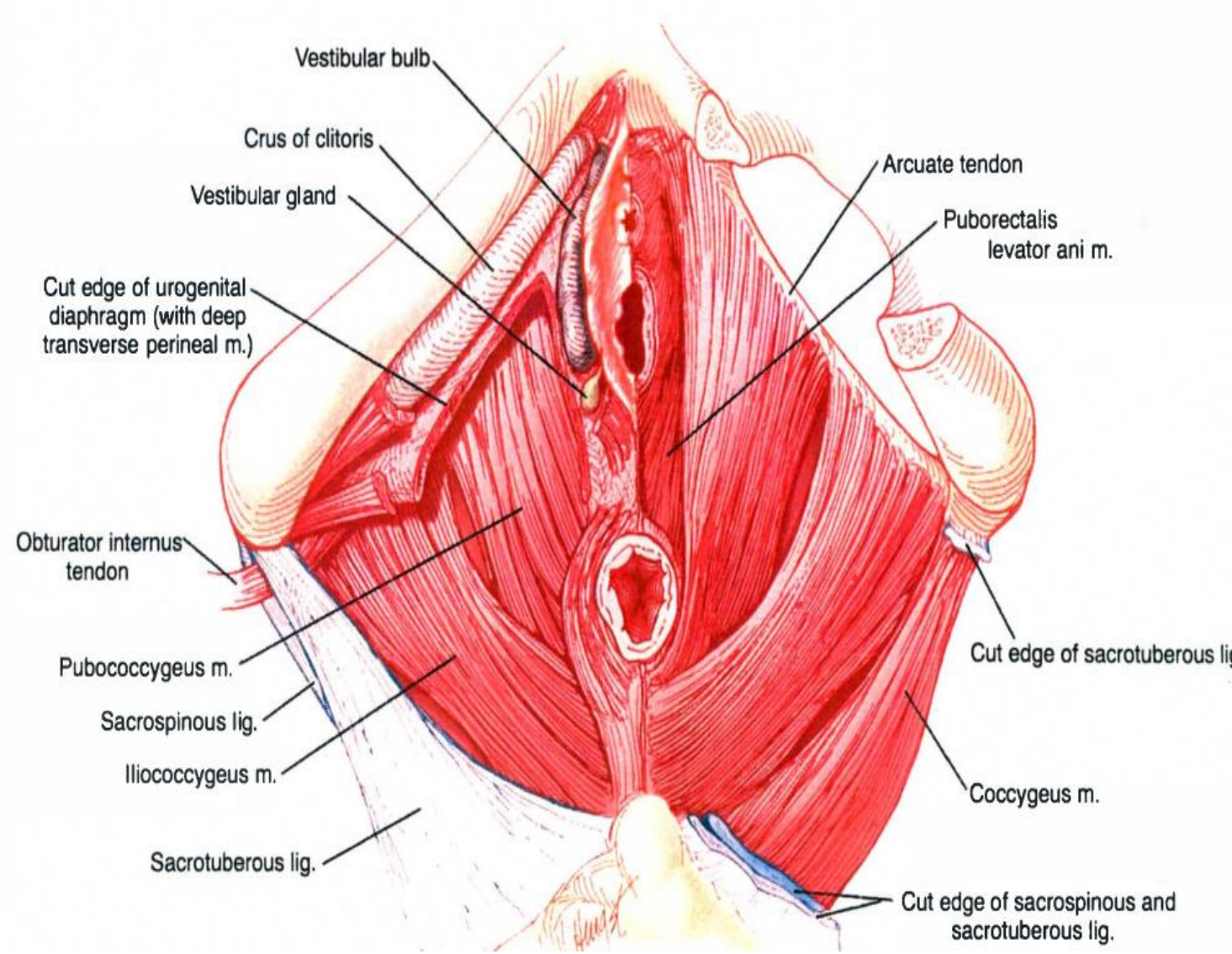
Bulbospongiosus Muscle

- origin: perineal body
- Insertion: the body of the clitoris
- Lie over the vestibular bulb anteriorly and the Bartholin's gland posteriorly
- With ischiocavernous muscles: pull the clitoris downward.
- Diminishes the orifice of the vagina
- Erection of the clitoris.



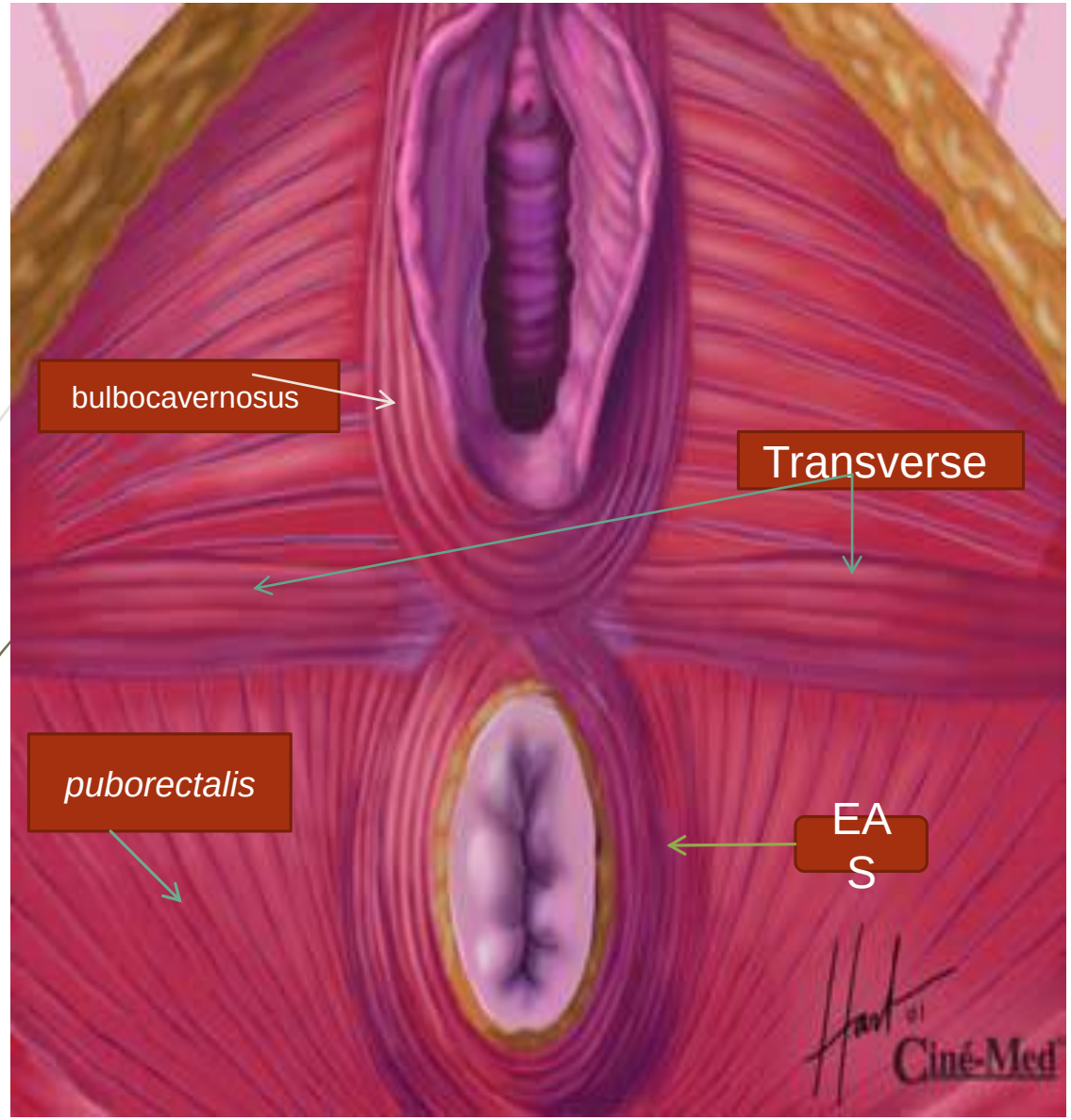
Ischiocavernosus Muscle

- Origin: The ischial tuberosities
- Insert on the upper crura and body of the clitoris.
- Maintain erection of the clitoris.



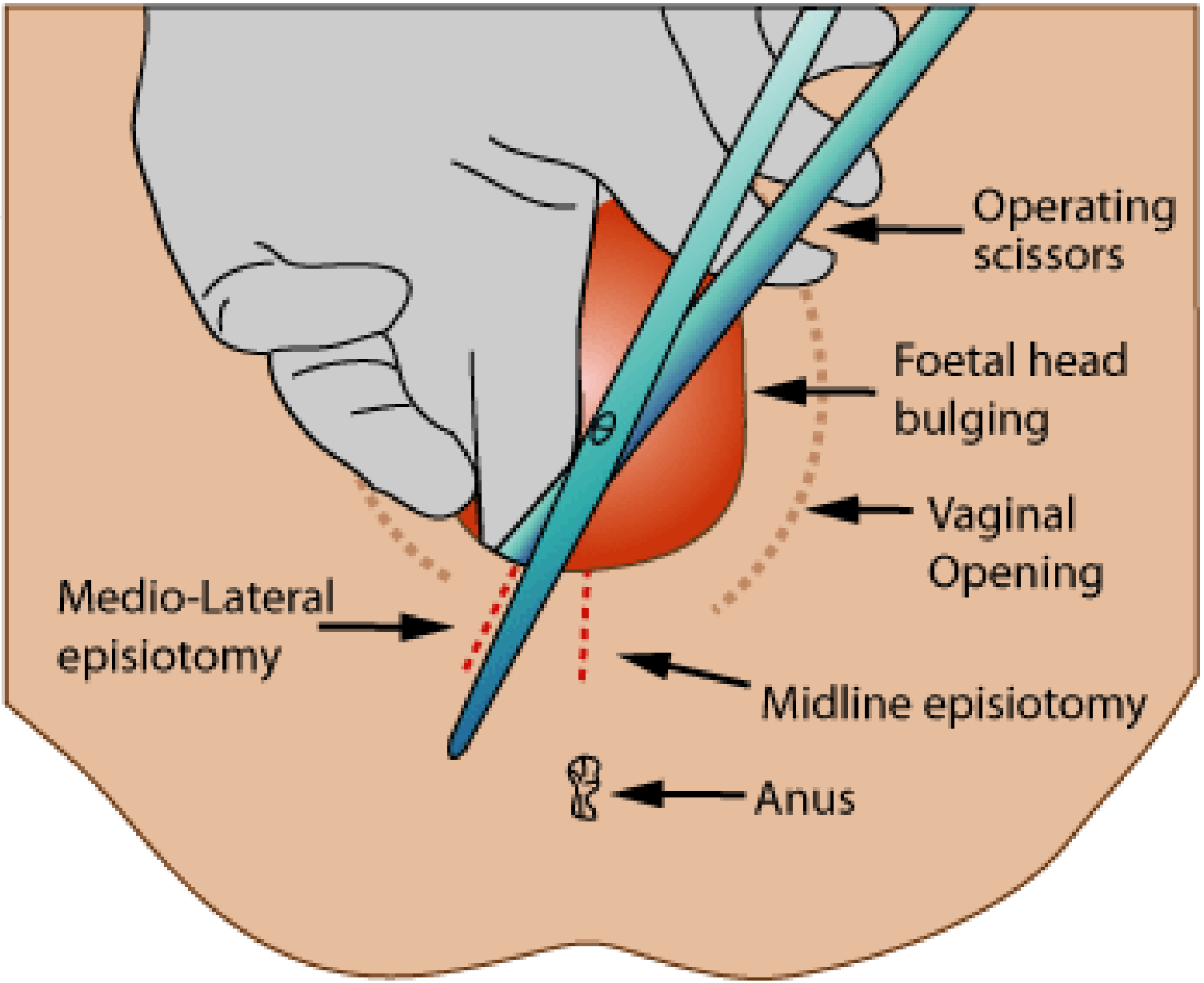
Perineal Body

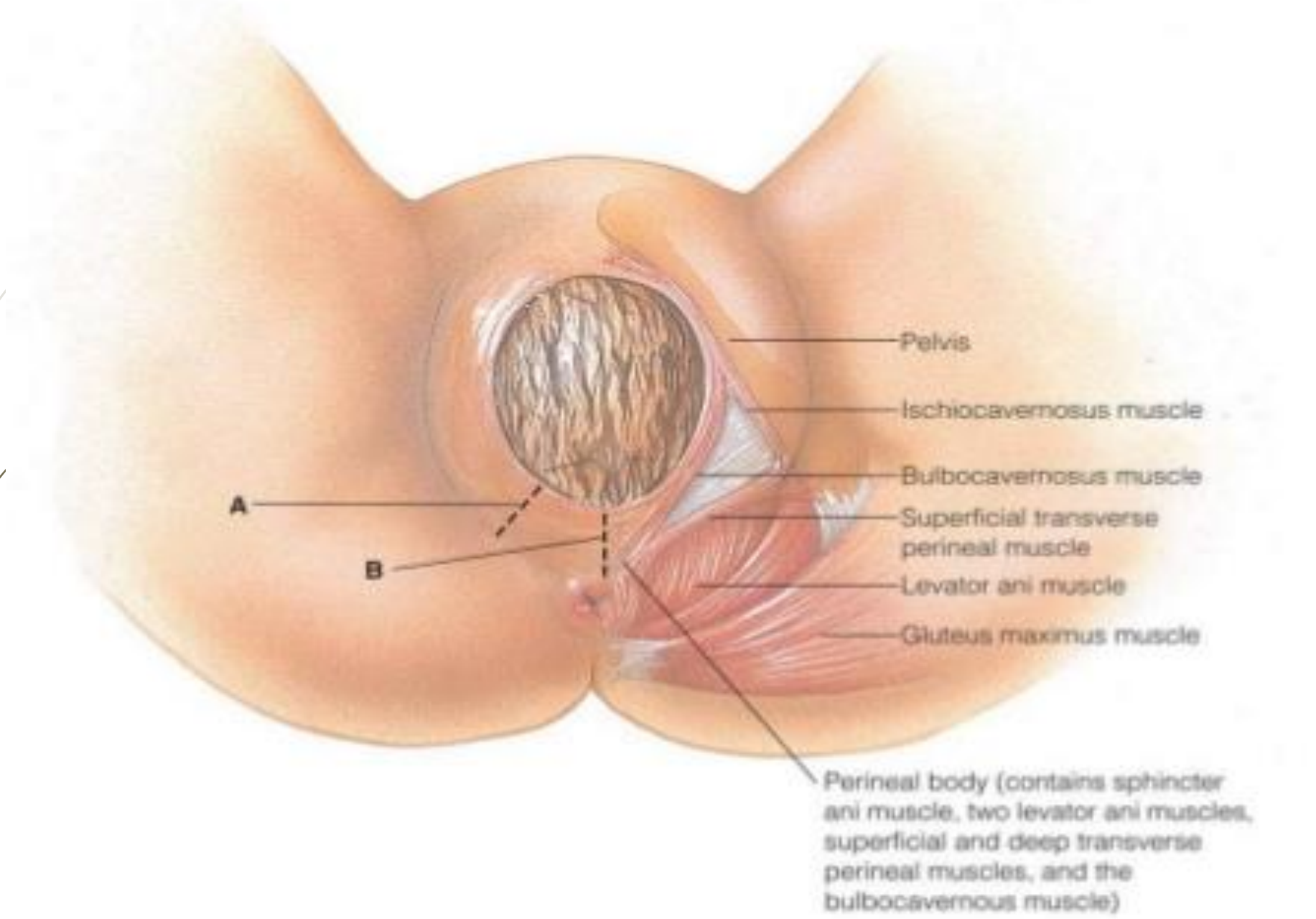
- Is the central point between the urogenital and the anal triangles
- Three-dimensional form the cone -insertion to fascia or a muscle of the perineum.
- perineal body : muscle fibres from bulbospongiosus, superficial transverse perineal, and EAS muscles.



The perineal body

- *The puborectalis* muscle and the external anal sphincter contribute additional muscle fibers.


Operating scissors
Foetal head bulging
Vaginal Opening
Medio-Lateral episiotomy
Midline episiotomy
Anus


Pelvis
Ischiocavernosus muscle
Bulbocavernosus muscle
A
Superficial transverse perineal muscle
B
Levator ani muscle
Gluteus maximus muscle
Perineal body (contains sphincter ani muscle, two levator ani muscles, superficial and deep transverse perineal muscles, and the bulbocavernous muscle)

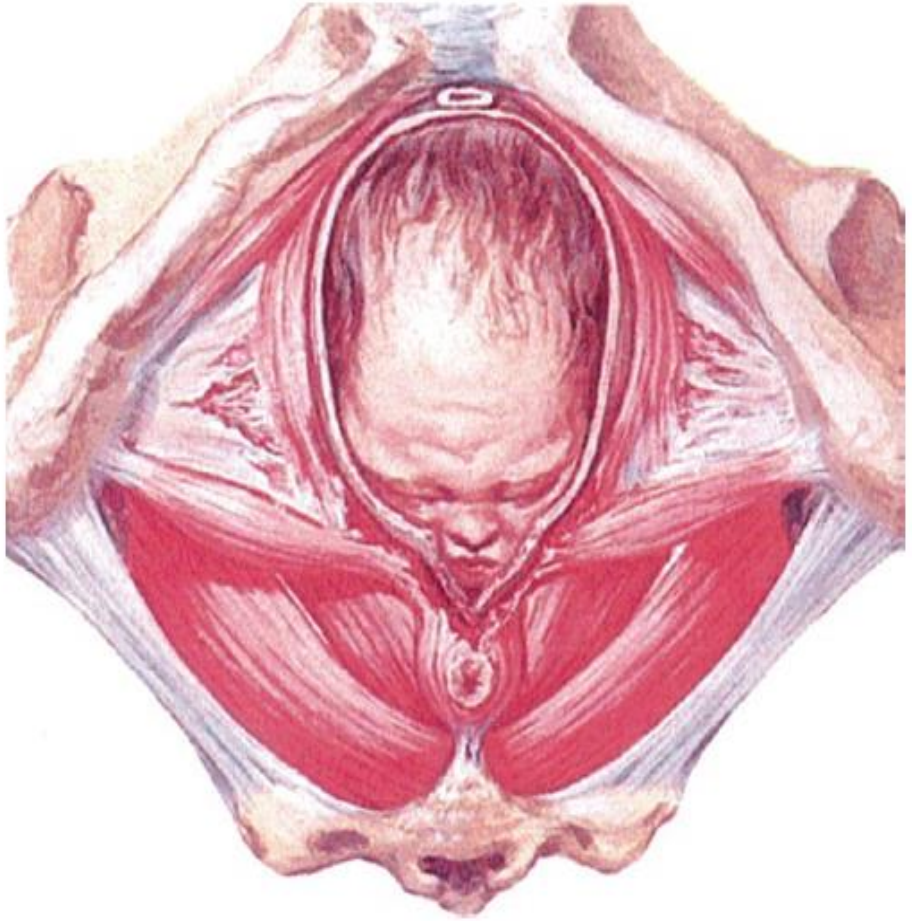
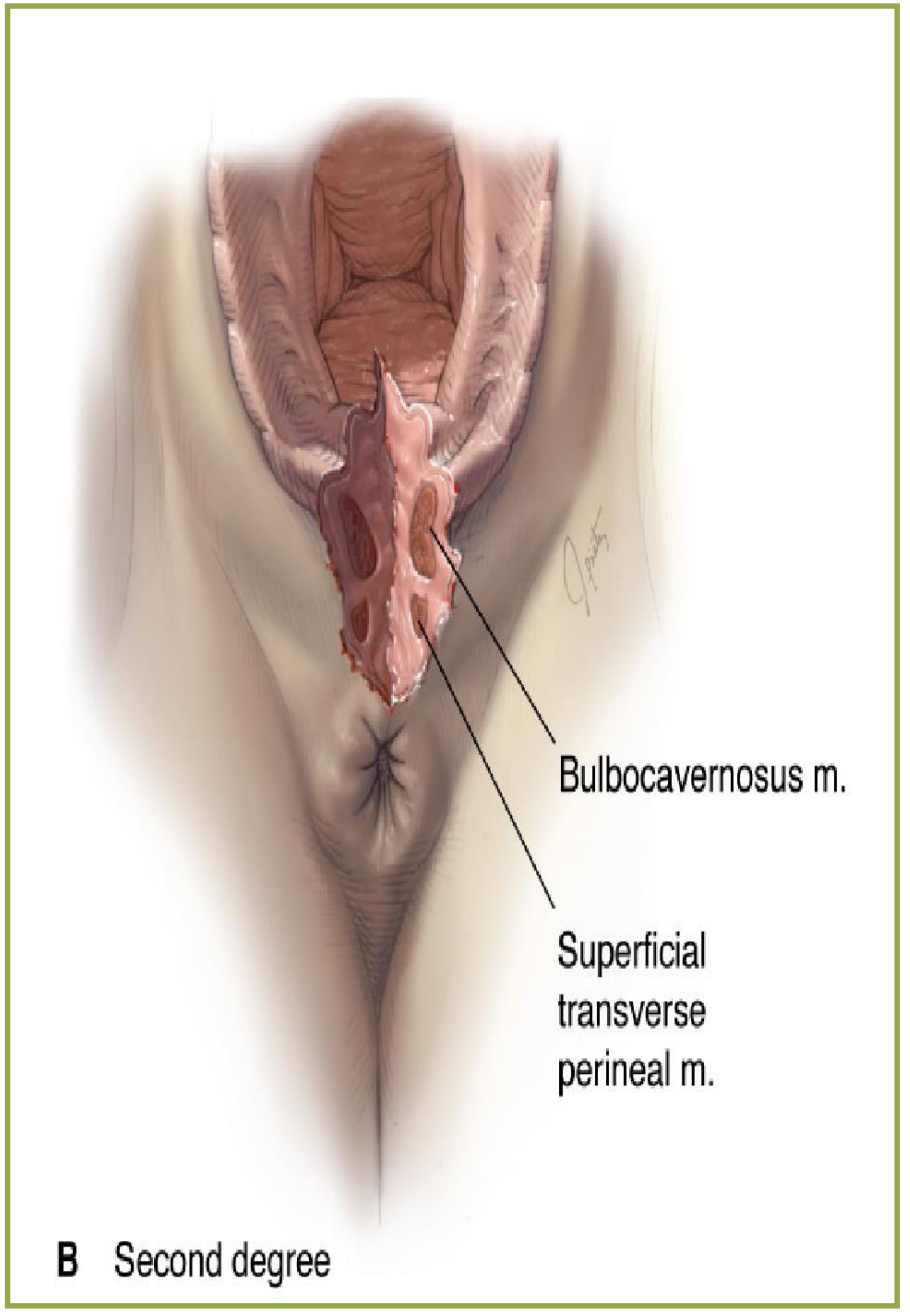
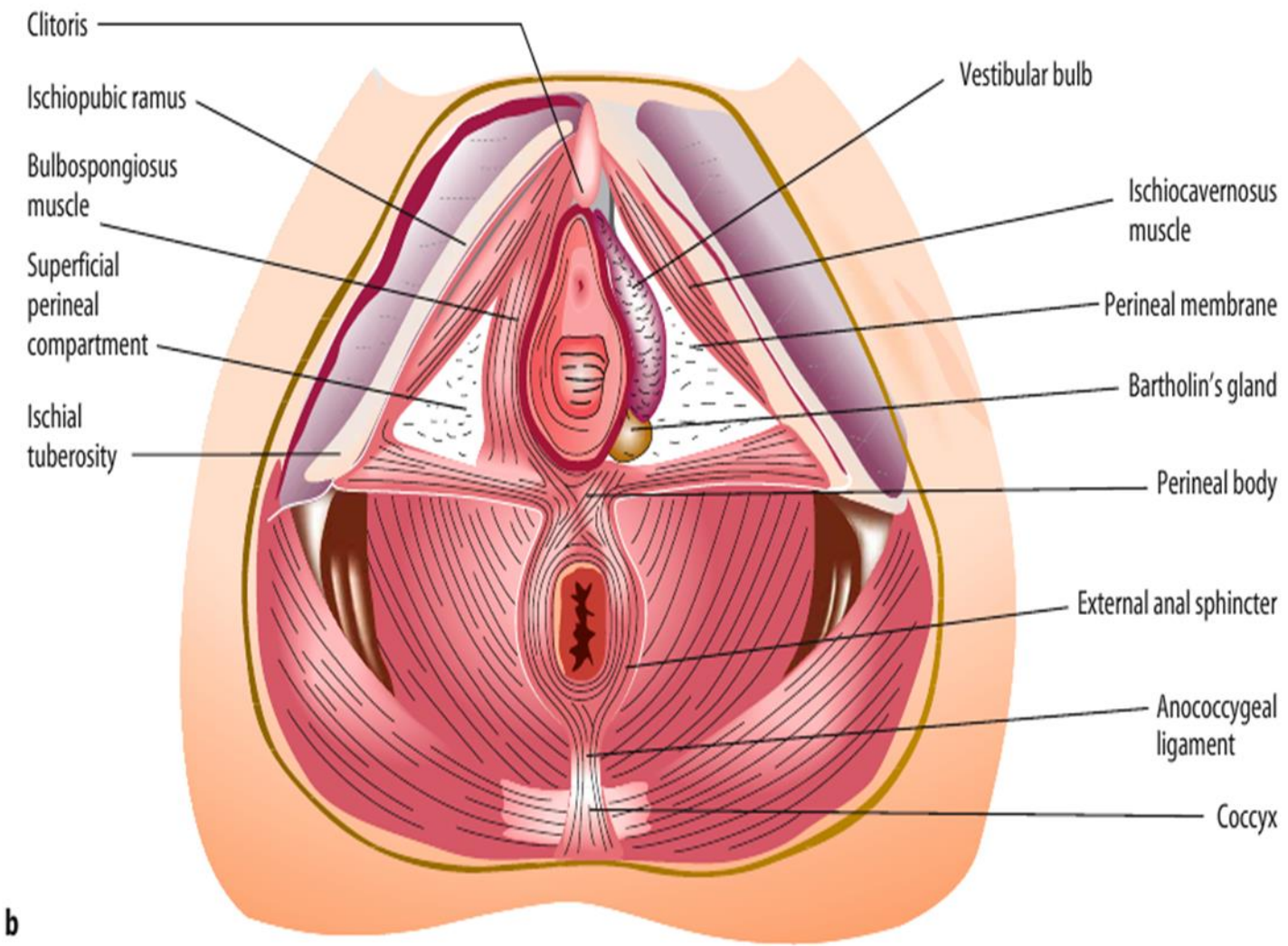


Fig. 2.3 Childbirth. Forcible lateral displacement of hiatal and perineal structures. The A-P diameter of the pelvis is 12–13 cm. A flexed head measures 9.4 cm, and a deflexed head 11.2 cm. The margin for prevention of damage is low (After Santoro)



The Anal Triangle

- This area includes
  - the anal canal
  - the anal sphincters
  - ischioanal fossae.
- Anal canal: 2.5 to 4 cm length
- Remains completely collapsed (tonic contractions of the sphincters)



anal canal

- The anal canal
  - Inner epithelial
  - Vascular subepithelium
  - Internalanal sphincter (IAS)
  - EAS
  - Fbromuscular supporting tissue.
- Embryologic derivation.
  - Proximal: Rectal mucosa (columnar epithelium)
  - vertical mucosal folds (Morgagni)
  - terminal radical of the superior rectal artery and vein (largest in the left-lateral, right-posterior and right-anterior) - three anal cushions.

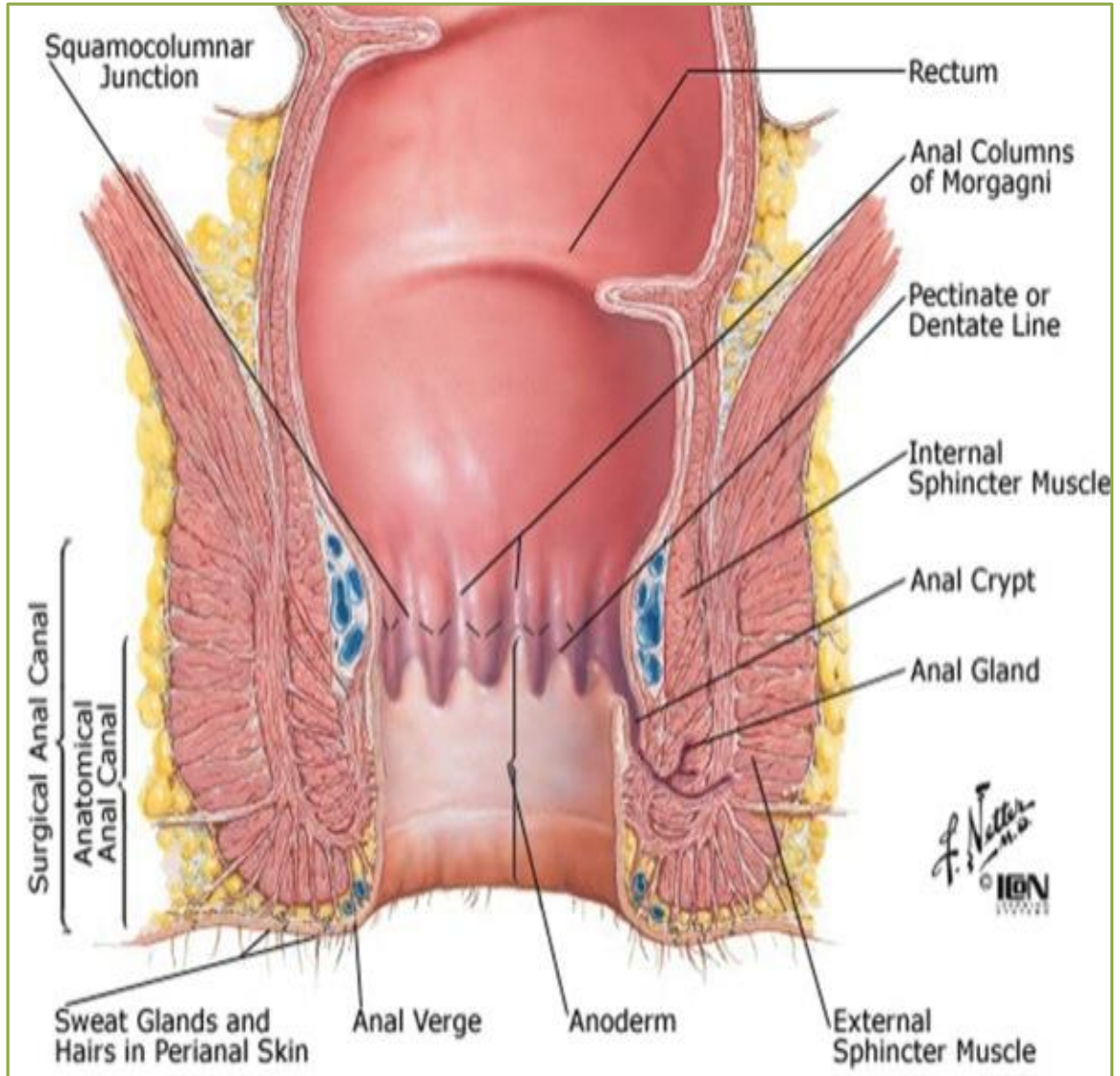


Figure 1. Anatomy of the anal canal.

Anal Canal

- cushions seal the anal canal and help maintain continence of flatus and liquid stools.
- Anoderm covers the last 1–1.5 cm of the distal canal
- squamous epithelium

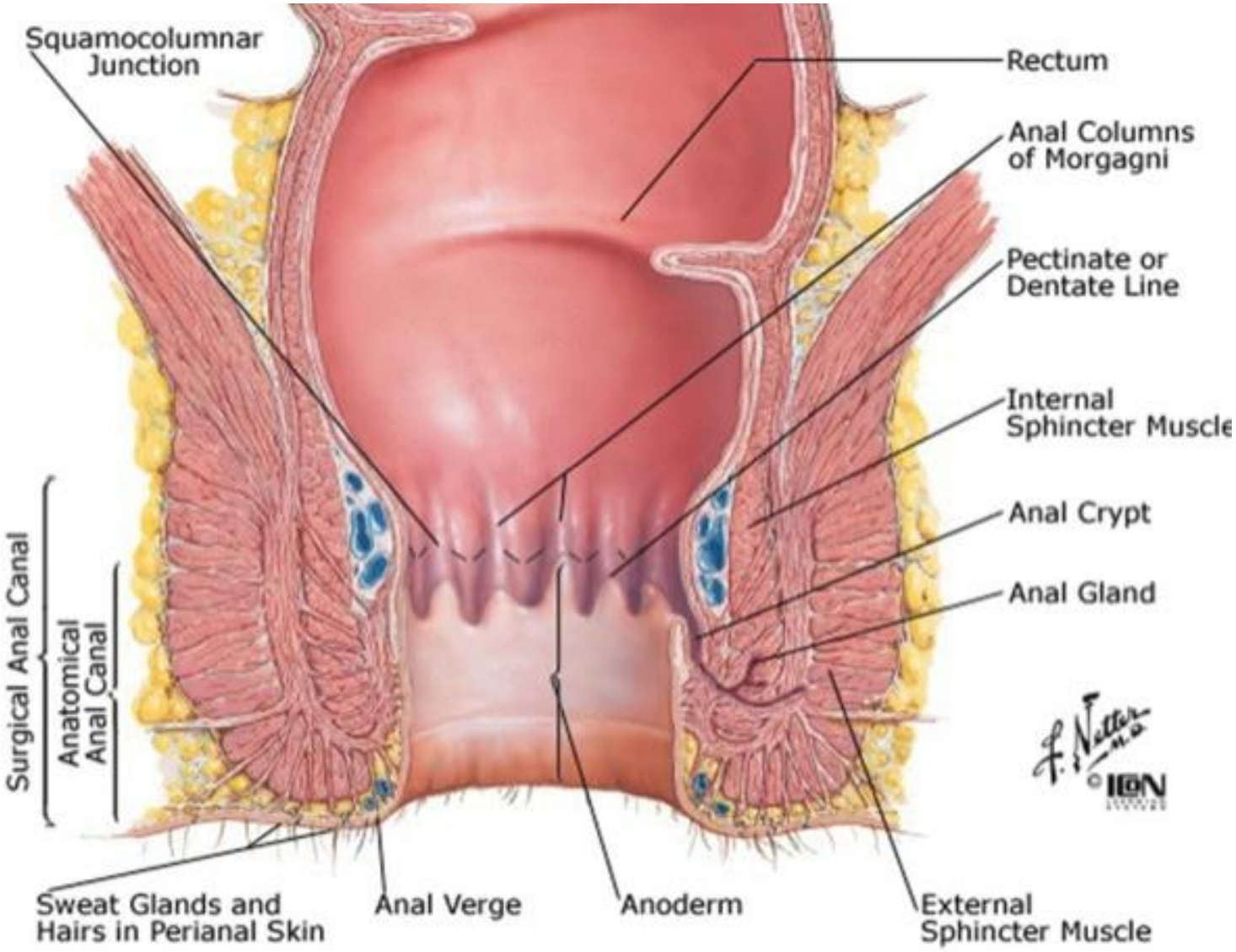
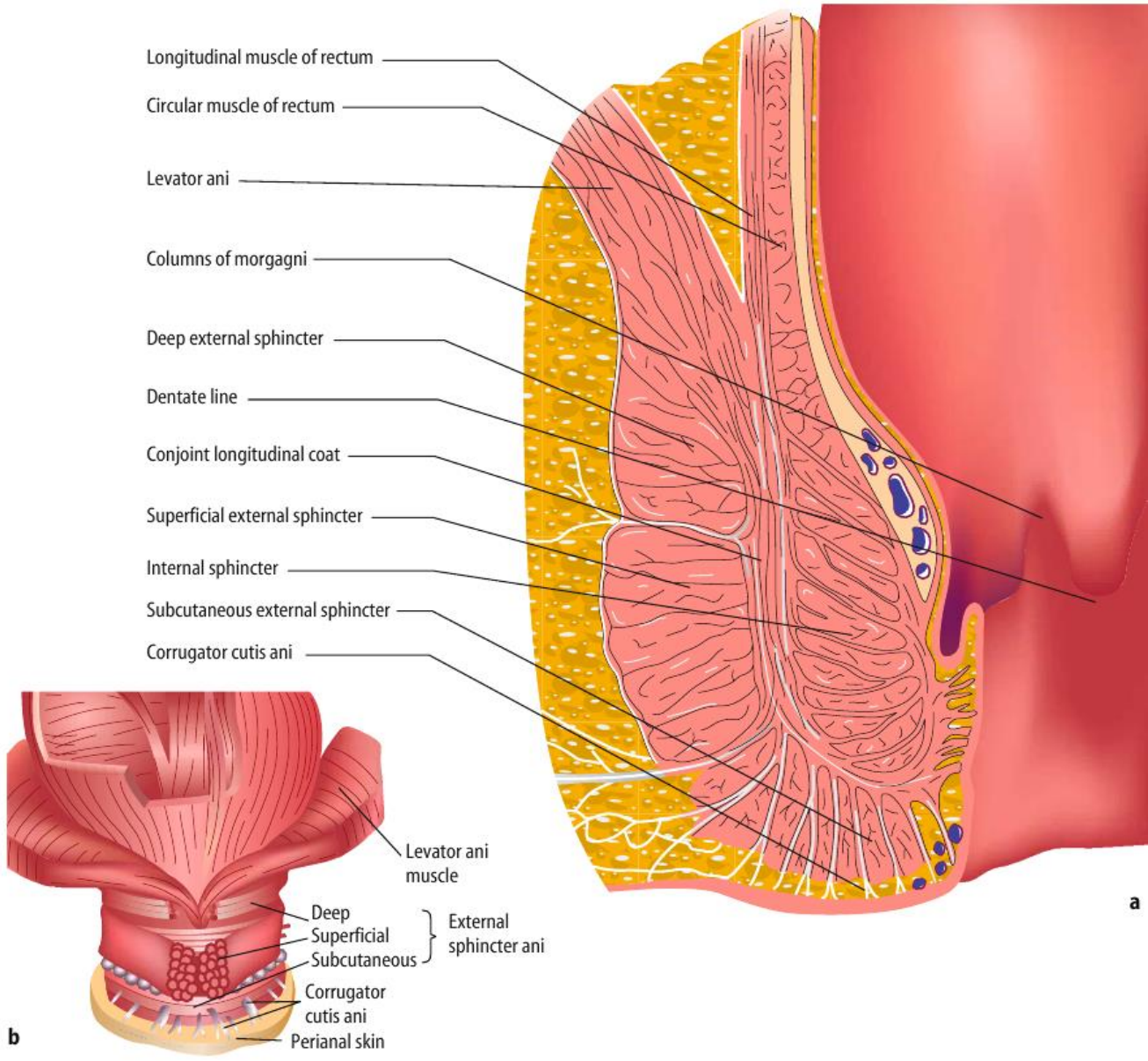


Figure 1. Anatomy of the anal canal.

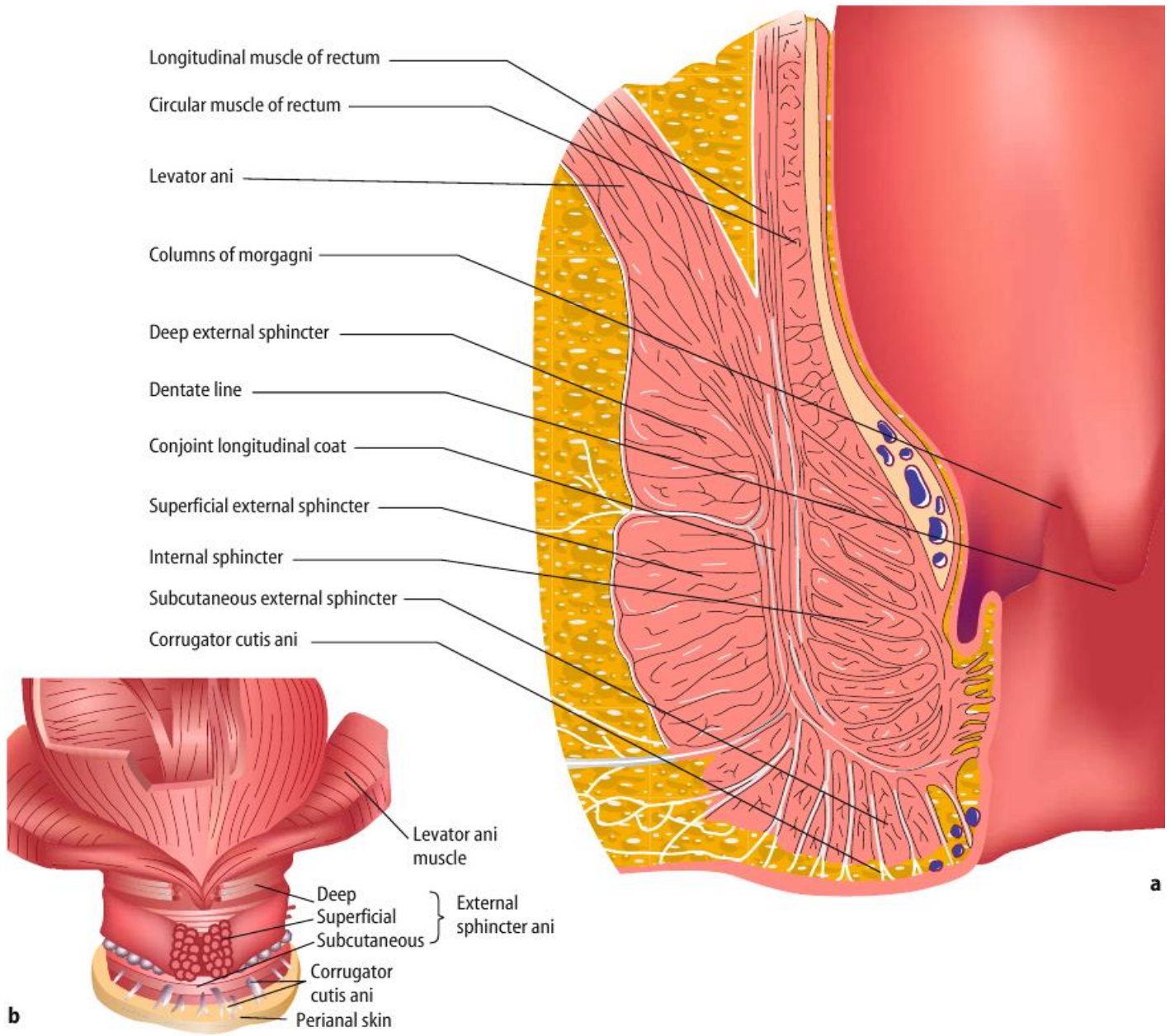
The internal anal sphincter(IAS)

- Circular smooth muscle of the bowel.
- 70% of the resting pressure - under autonomic control.
- Separated from the EAS by the conjoint longitudinal muscle
- during regional or general anesthesia the paralyzed EAS lies almost at the same level as the IAS.



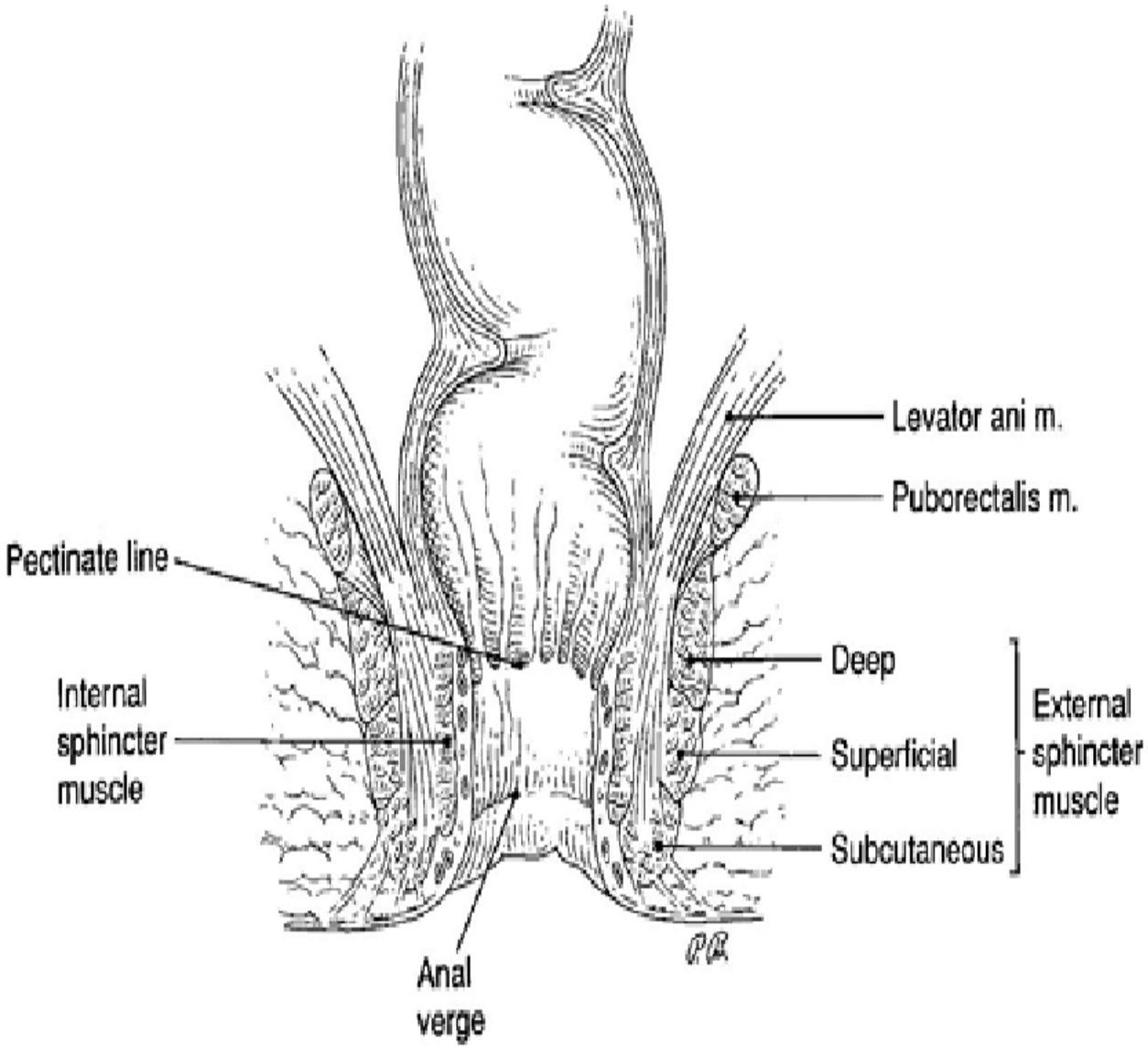
External Anal Sphincter

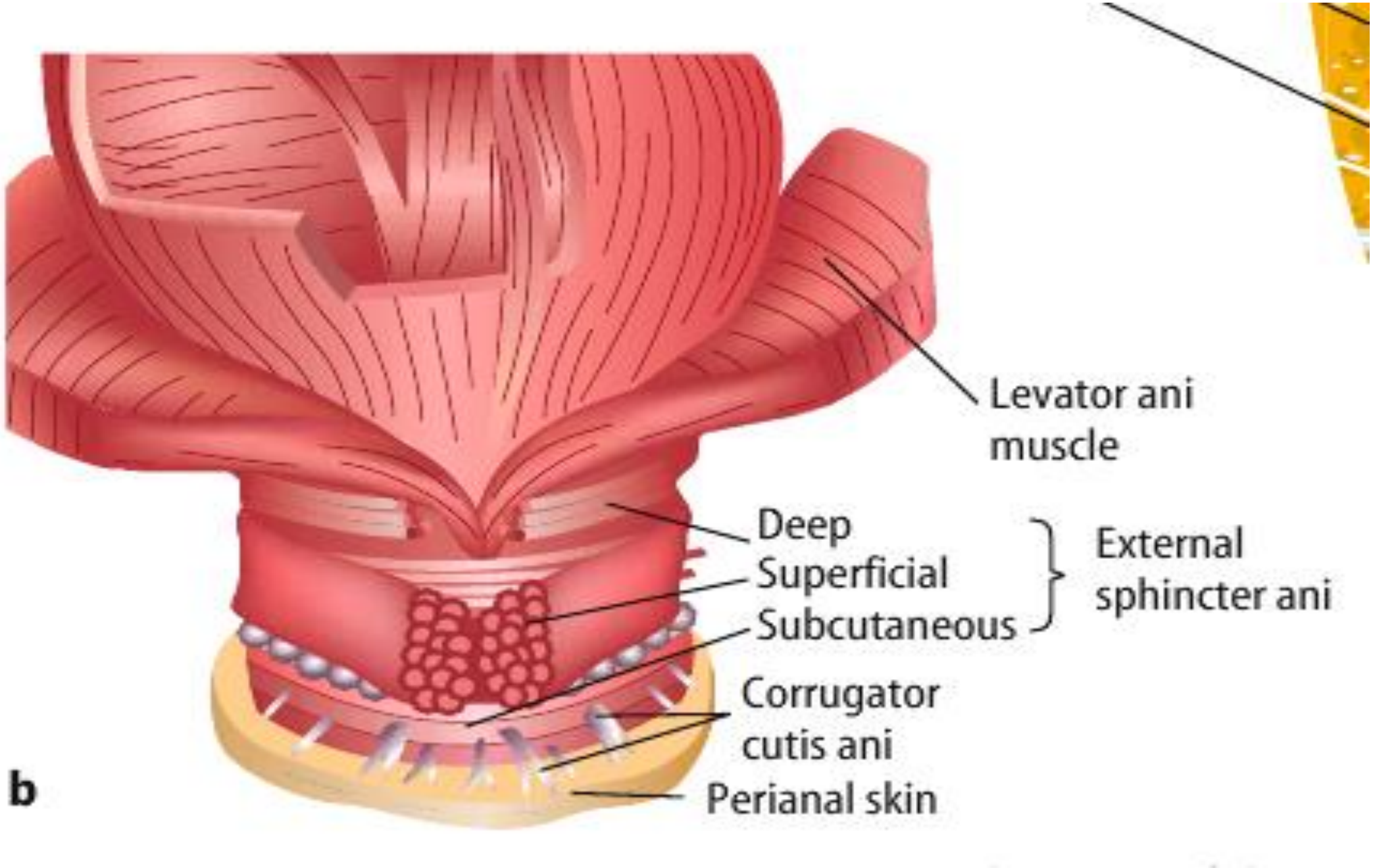
- Striated muscle
  - Subcutaneous
  - Superficial
  - Deep
- responsible for
  - Voluntary squeeze
  - Reflex contraction pressure
- Innervated by the pudendal nerve - mixed sensory and motor



External Anal Sphincter

- Subdivisions are not easily demonstrable during anatomical dissection or surgery
- relevance during imaging
- superficial EAS - posteriorly to the anococcygeal ligament
- subcutaneous -attachments to perineal body and anococcygeal ligament
- bulbospongiosus and transverse perineii fuse with the EAS




Levator ani muscle
Deep
Superficial
Subcutaneous
External sphincter ani
Corrugator cutis ani
Perianal skin
b

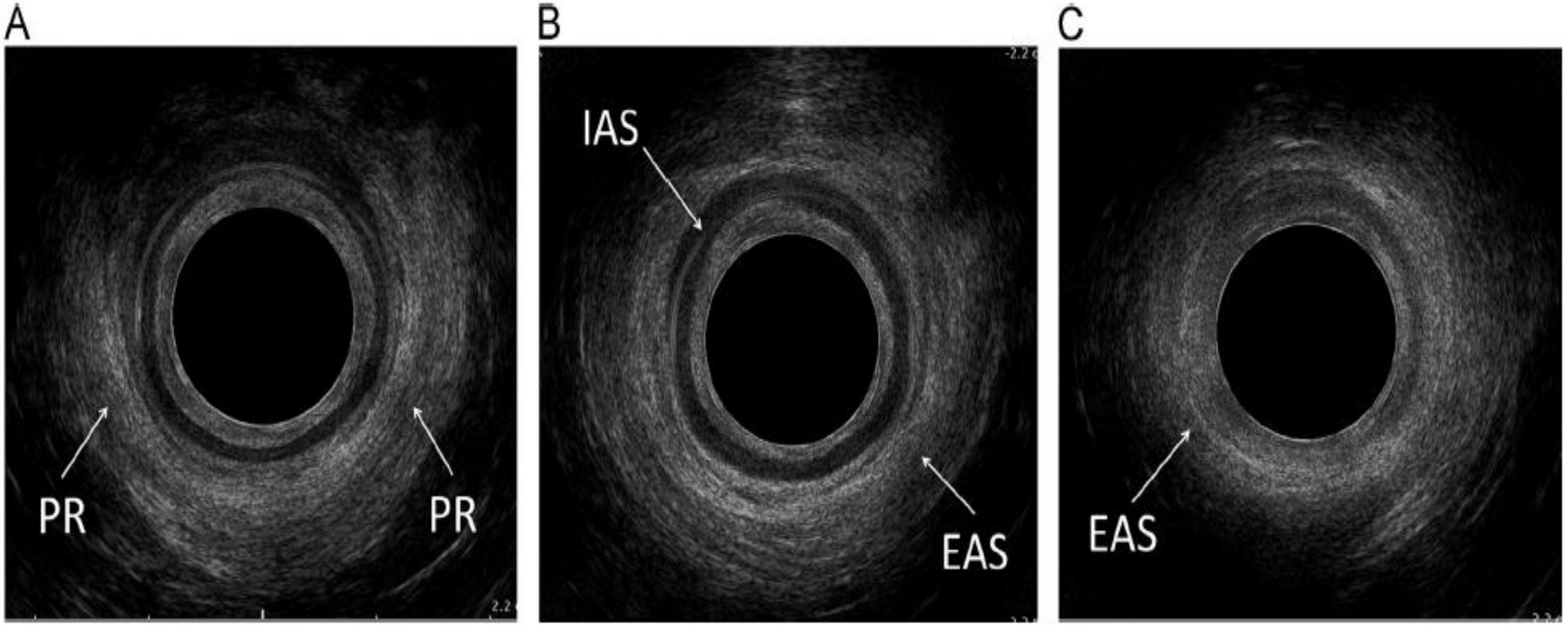
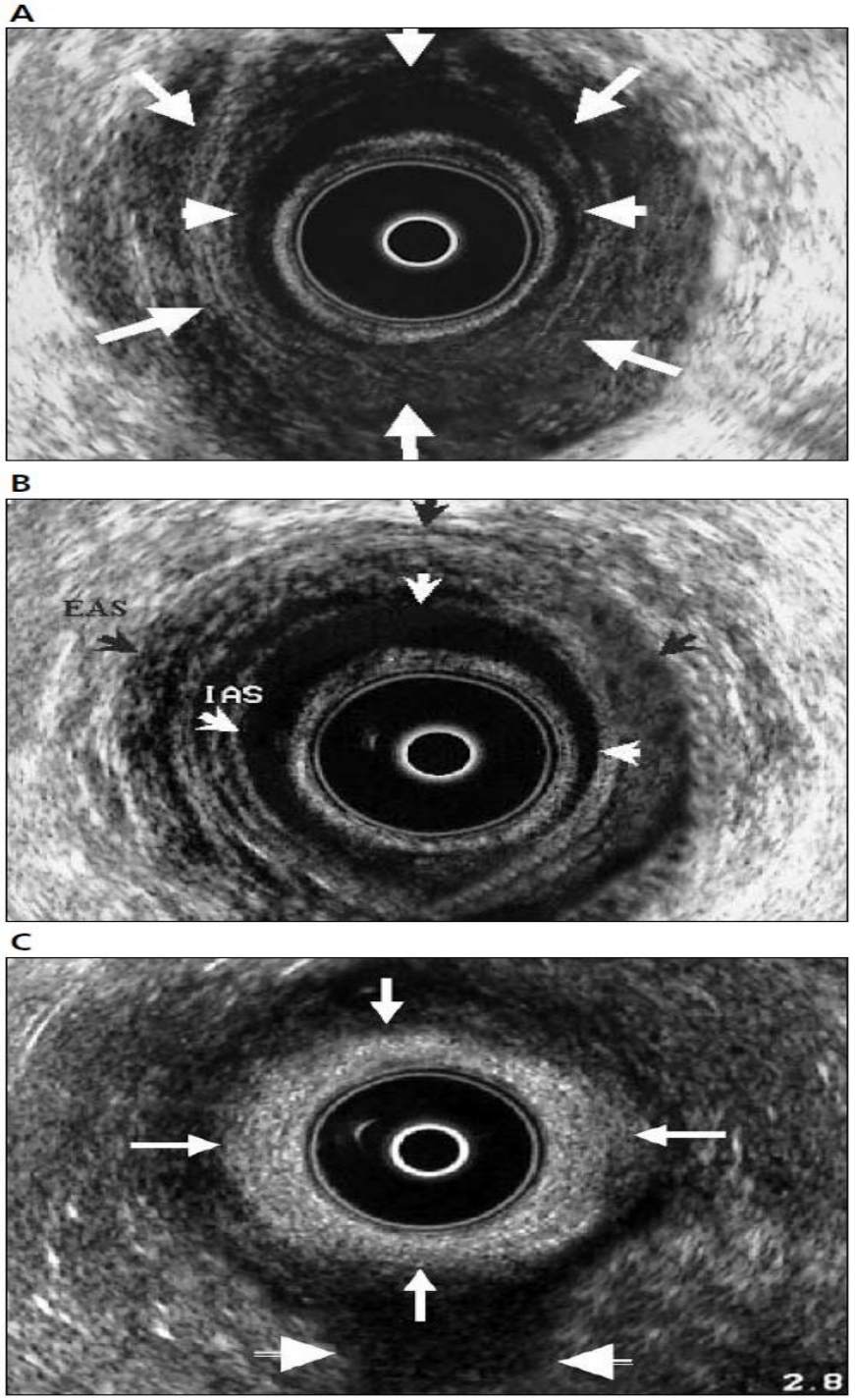


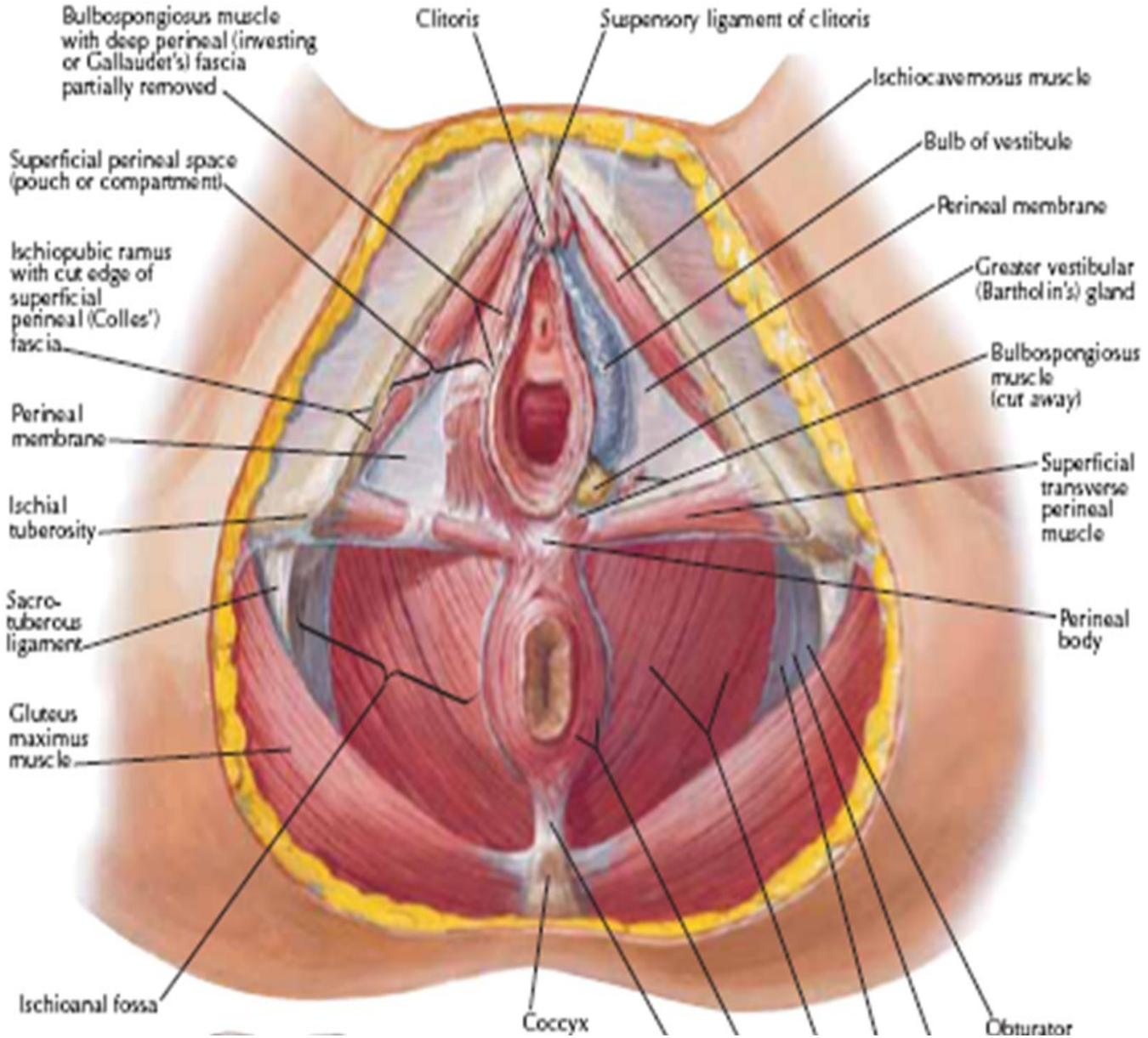
Fig. 12. 3D-endoanal ultrasound. The anal canal is divided into three levels of assessment in the axial plane, defined by the following landmarks: (A) upper level: puborectalis muscle (PR); (B) middle level: internal (IAS) and external anal sphincter (EAS); (C) lower level: external anal sphincter.



[redacted] Normal endoanal sonographic appearances of anal sphincters at 3 different levels. **A**, Upper anal canal level, identified by the horseshoe sling of the puborectalis muscle posteriorly (arrows) and loss of the EAS in the midline anteriorly. The IAS is also shown by arrowheads. **B**, Middle canal level, identified by the completion of the EAS ring anteriorly (black arrows) and maximum IAS thickness (white arrows). **C**, Lower canal level, defined as that immediately caudal to the termination of the IAS and comprising the subcutaneous the EAS (arrows). The anococcygeal ligament is also shown posteriorly (arrowheads).

Ischioanal Fossa(ischiorectal fossa)

- extends around the anal canal
  - Anterior : perineal membrane
  - Superior : levator ani fascia
  - Medial: EAS
  - Lateral : obturator fascia
  - Inferior: transverse fascia, separate perianal space.
  - Posterior: gluteus max and sacrotuberous lig.
- Fat- pudendal nerve – Int. pudendal V- which enter through Alcocks's canal.



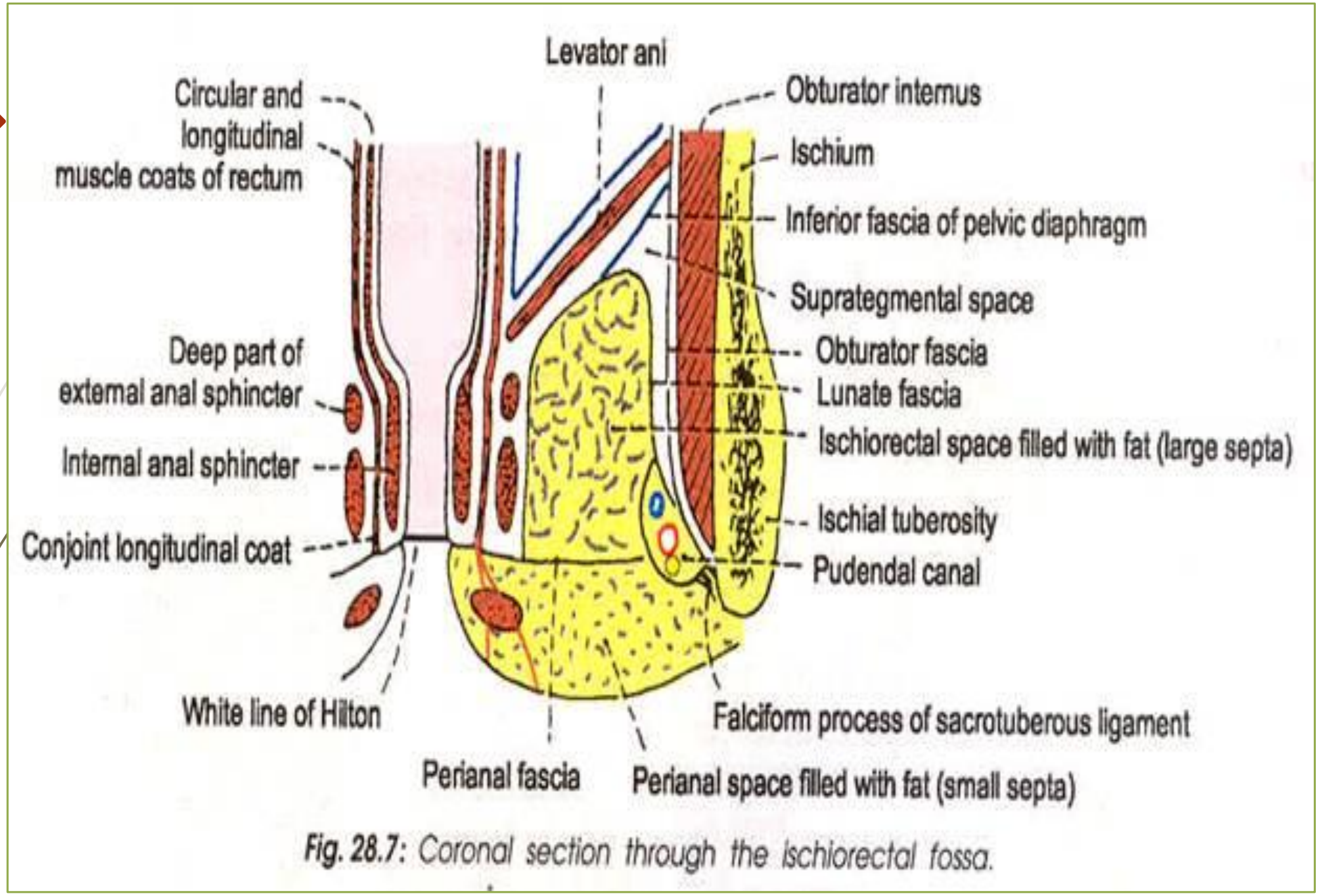


Fig. 28.7: Coronal section through the ischiorectal fossa.

- 1- کدام عضلات هنگام اپیزیوتومی بریده میشوند؟

الف: بولبو کاورنوس

ب: لواتور آنی

ج: ایسکیو کاورنوس

- 2- بیشترین سهم تون رست آنوس مربوط به کدام عضله است؟

الف: لواتور آنی

ب: اسفنگتر داخلی

ج: اسفنگتر خارجی

- 3- در سونو اندو آنال در نمای تحتانی آنوس کدام عضله دیده میشود؟

الف: لواتور آنی

ب: اسفنگتر خارجی

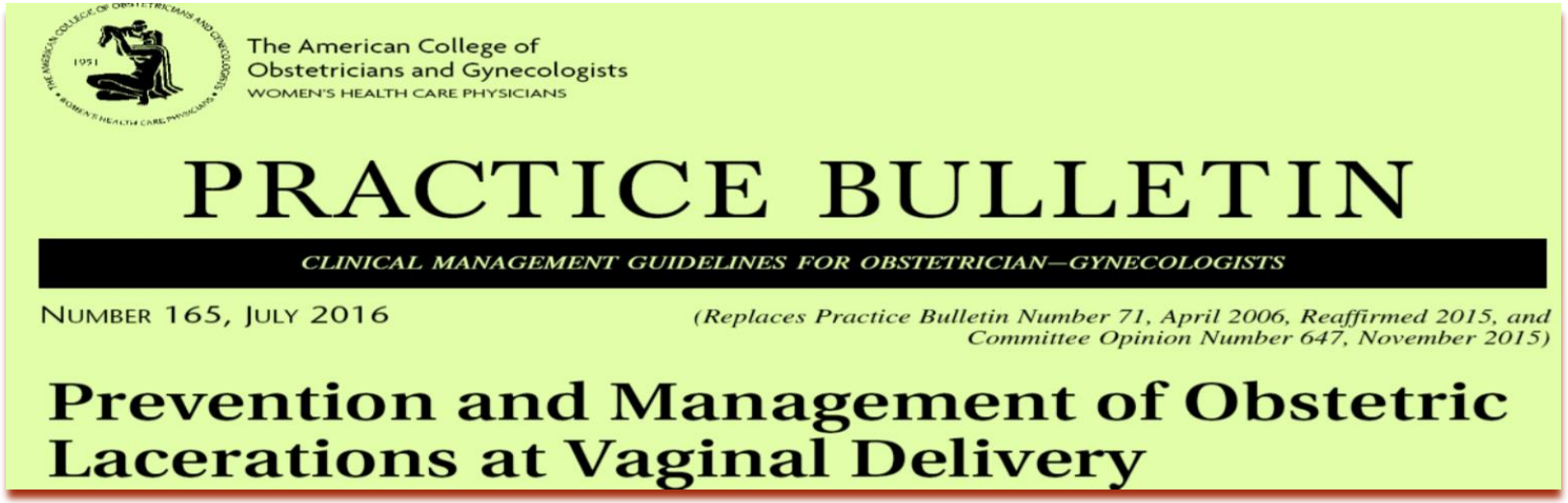
ج: اسفنگتر داخلی

The Management of Third- and Fourth-Degree Perineal Tears

Green-top Guideline No. 29

June 2015

AND



- 1- کدام مورد برای کاهش OASIS توصیه شده است؟

الف: ماساژ پرینه

ب: کمپرس گرم

ج: مانور دادن برای خروج سر

د: اپی مدیولترال

- 2- بهترین روش توصیه شده برای تشخیص آسیب اسفنگتر هنگام زایمان کدام است؟

الف: سونو اندوآنال بر بالین بیمار

ب: معاینه رکتو واژینال

- 3- بهترین روش برای ترمیم ***اسفنکتر داخلی*** کدام است؟

الف: Overlap

ب: End-to-End

ج: فرقی ندارد

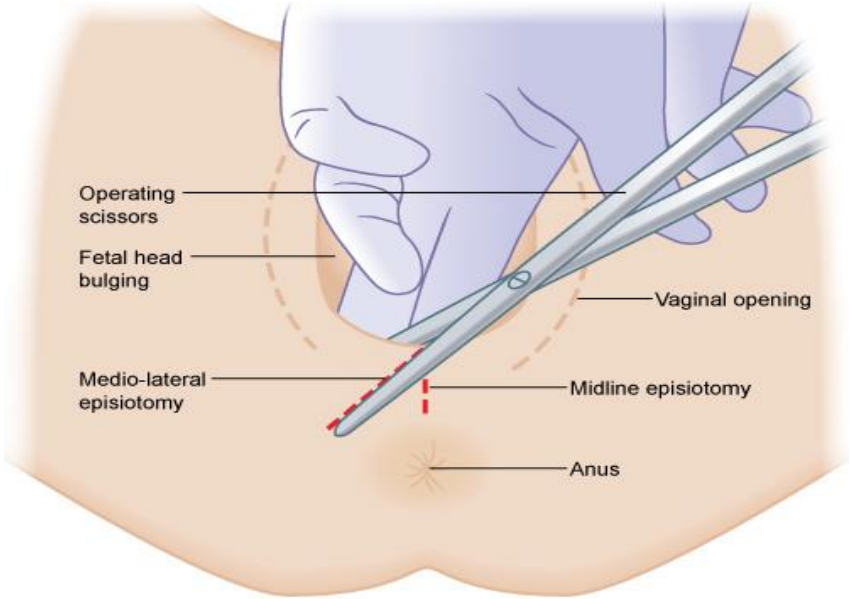
- 4- بهترین روش برای ترمیم ***اسفنکتر خارجی*** کدام است؟

الف: Overlap

ب: End-to-End

ج: فرقی ندارد

Episiotomy is a surgical enlargement of the posterior aspect of the vagina by an incision to the perineum during the last part of the second stage of labor



Incidence

53–79% : some type of laceration at vaginal delivery

12%: include an episiotomy

Changing trends in obstetrical practice resulted in a decreasing prevalence of the procedure. **UP TO DATE**

In 1979: 61 percent

In 2004 : 25 percent

In 2006 :17 percent

In 2012 :12 percent

First degree: laceration of the vaginal epithelium or perineal skin only.

Second degree: involvement of the perineal muscles but not the anal sphincter.

Third degree: disruption of the anal sphincter muscles which should be further subdivided into:

- **3a:** <50% thickness of external sphincter torn.
- **3b:** >50% thickness of external sphincter torn.
- **3c:** internal sphincter also torn.

Fourth degree: a third degree tear with disruption of the anal epithelium as well.

NICE

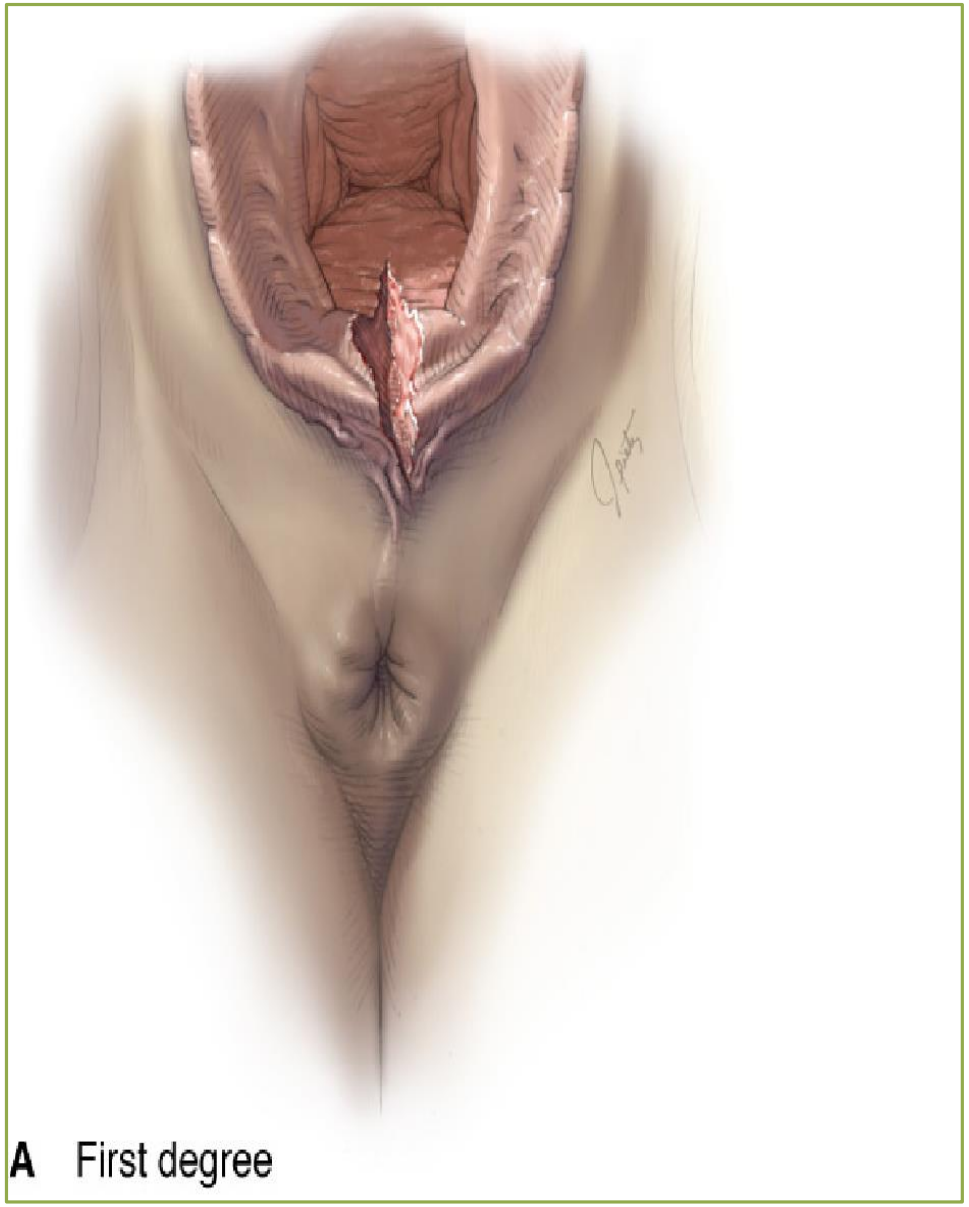
- First-degree

Fourchette

Perineal skin

Vaginal mucous

Periurethral



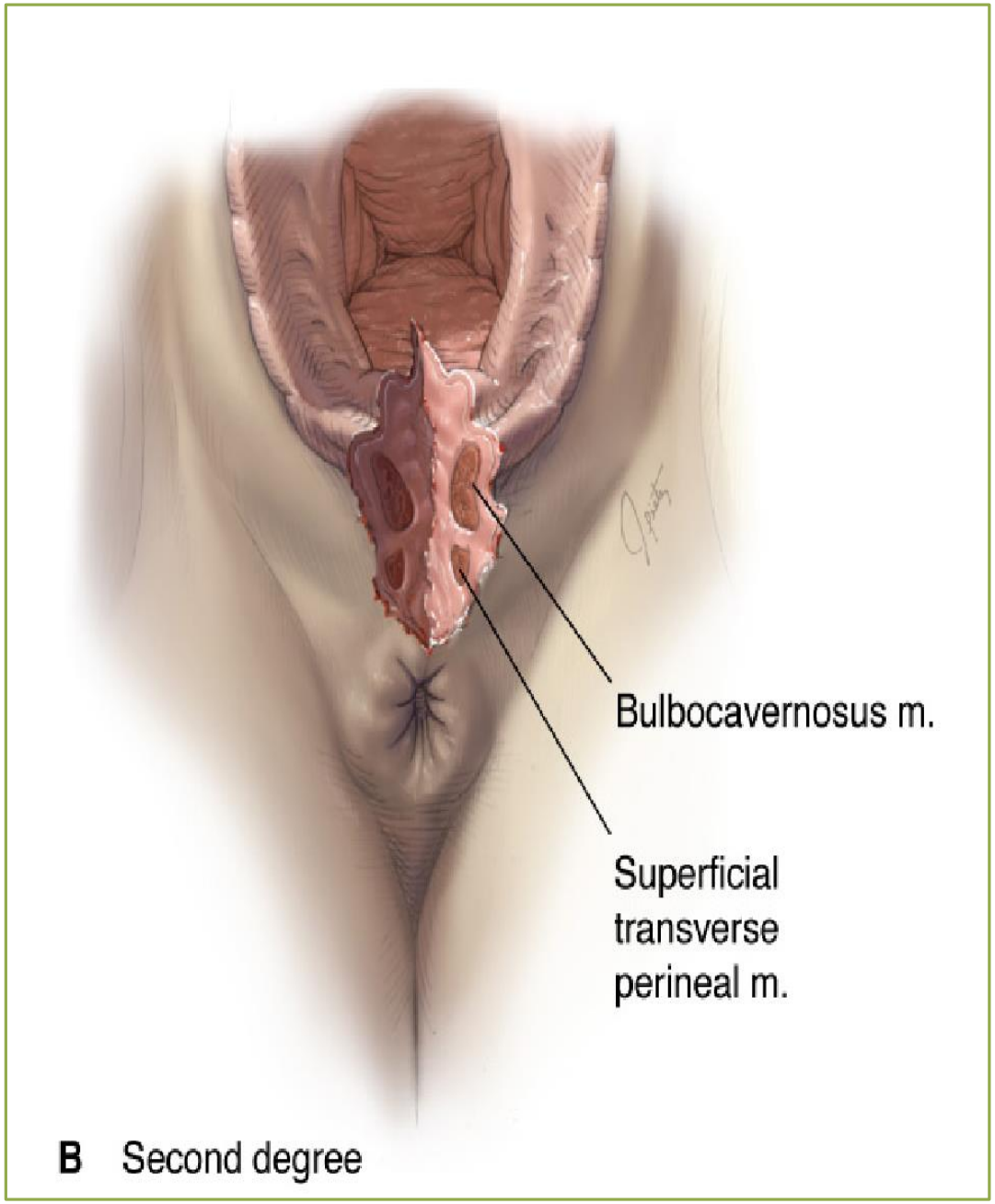
A First degree

Second-degree lacerations

Fascia

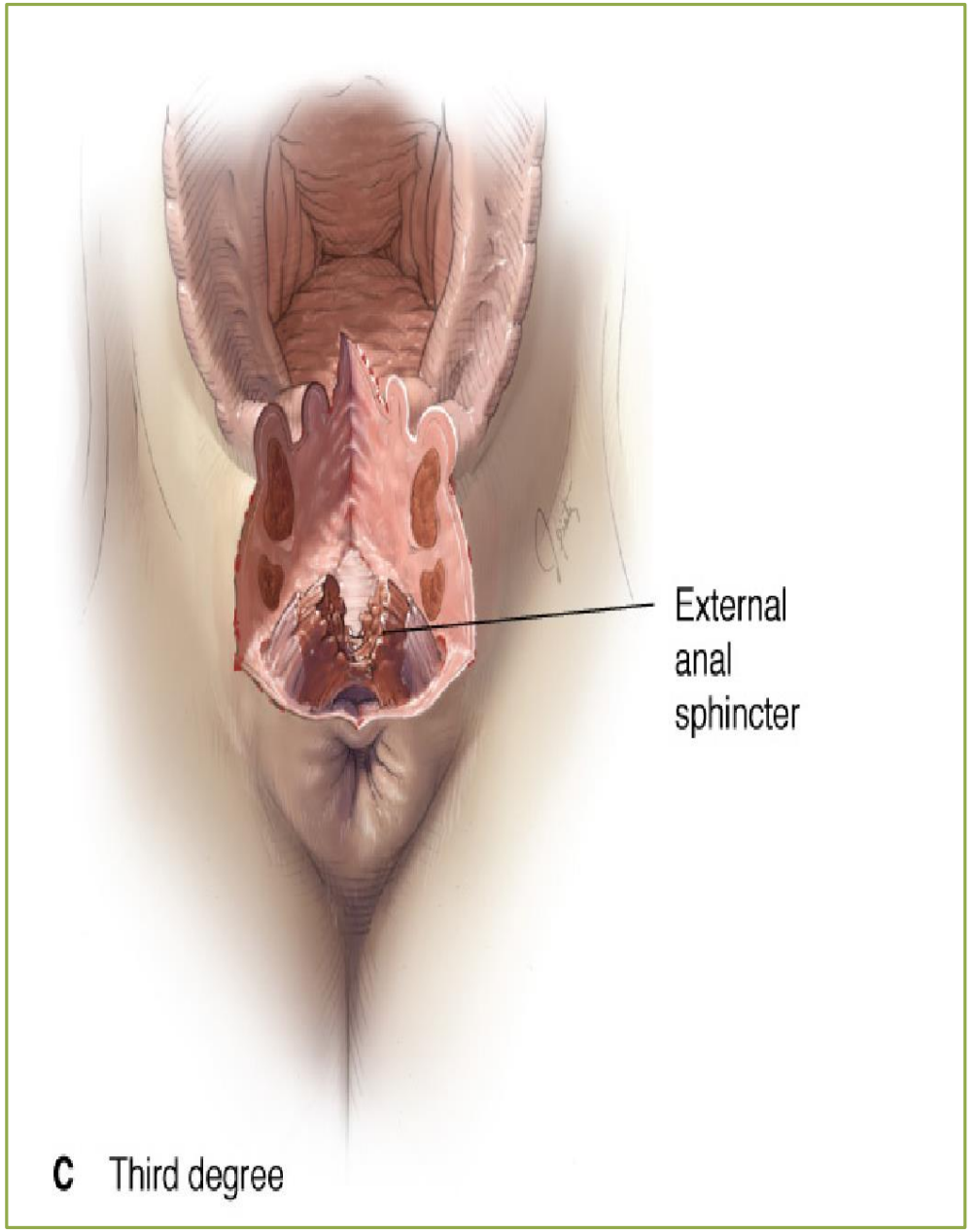
Muscles

Perineal body



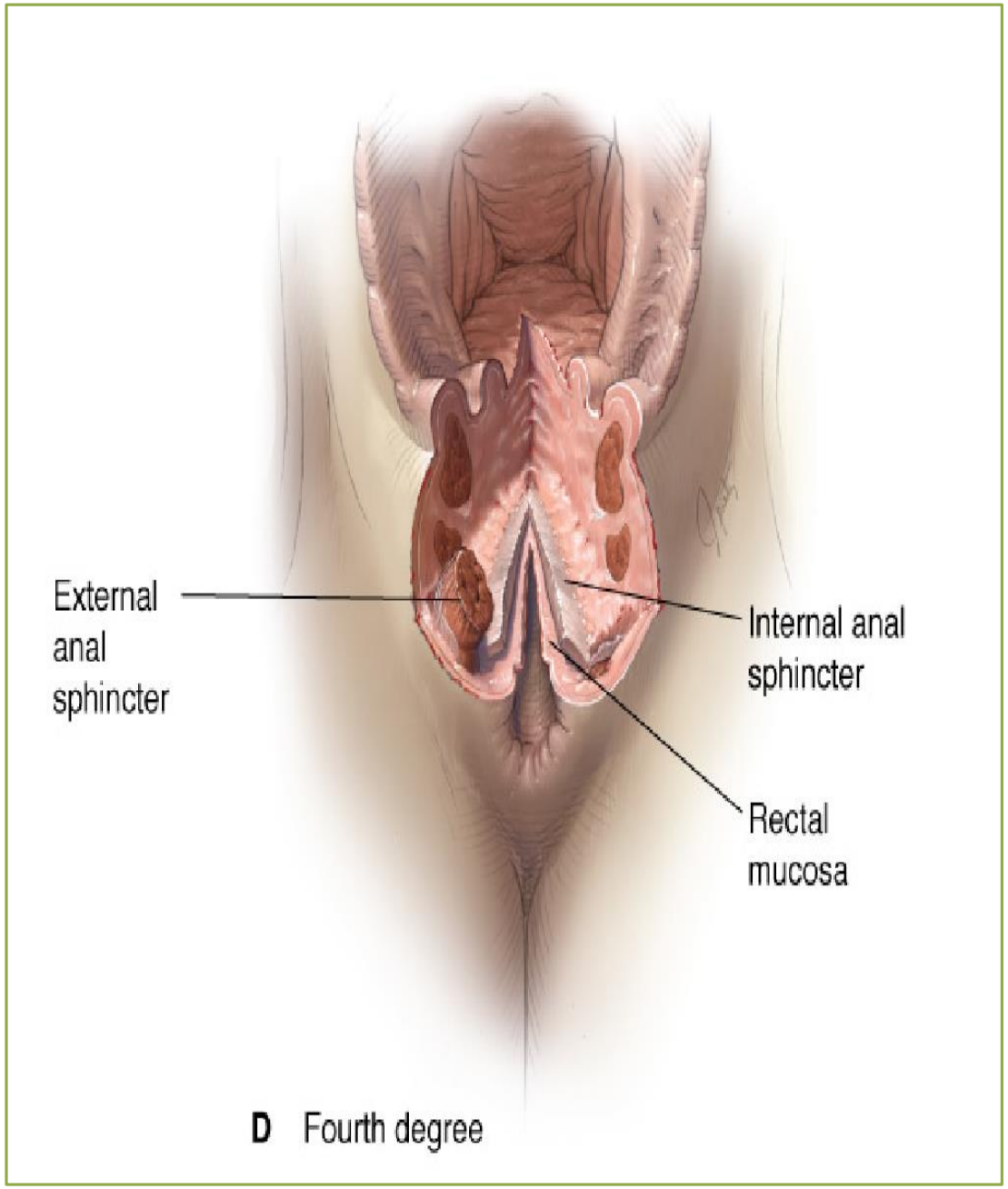
Third-degree lacerations

- Extend to anal sphincter
- 3a<50% of EAS
- 3b>50% EAS torn
- 3c IAS torn



fourth-degree laceration

extends through the rectum's mucosa



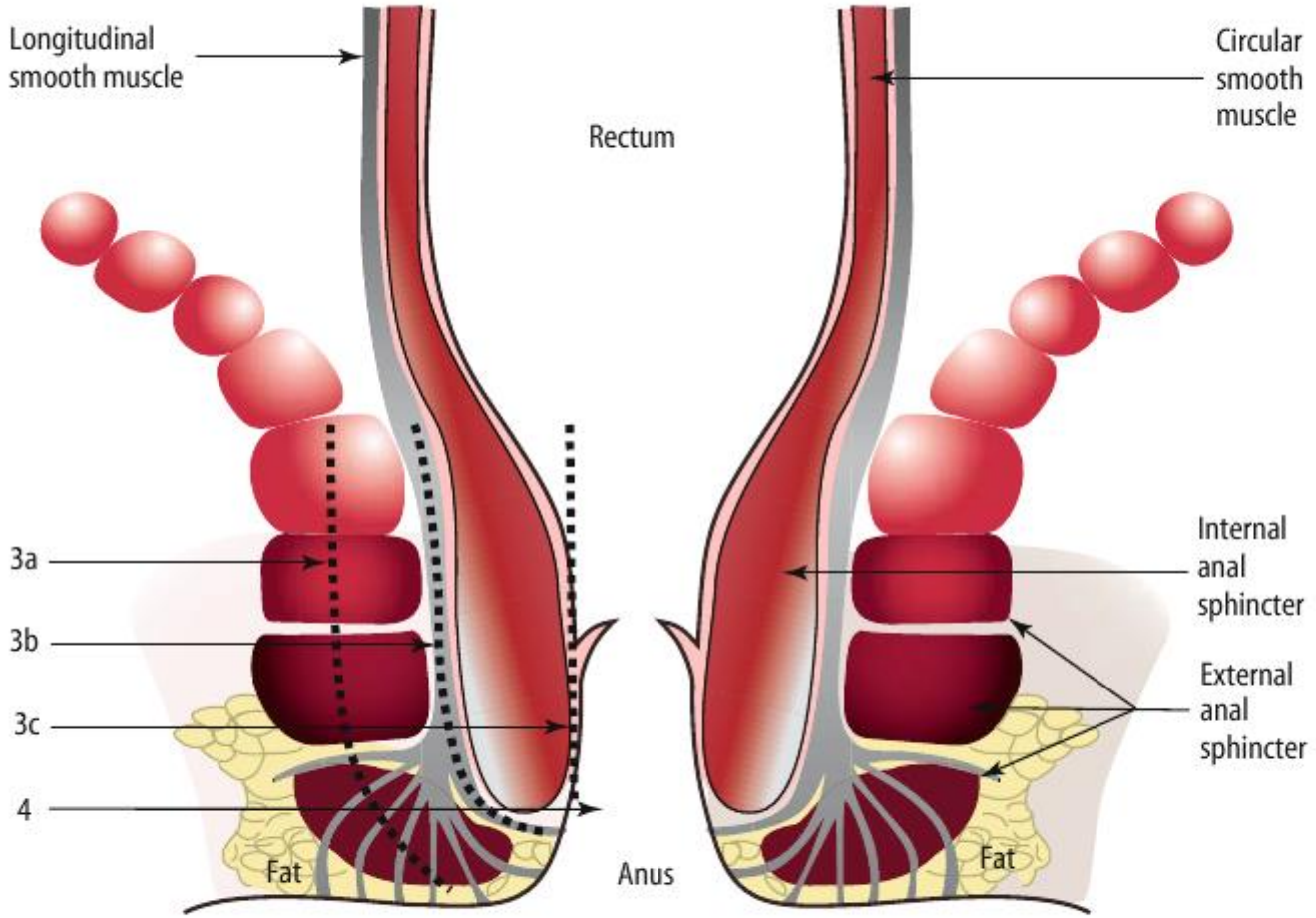
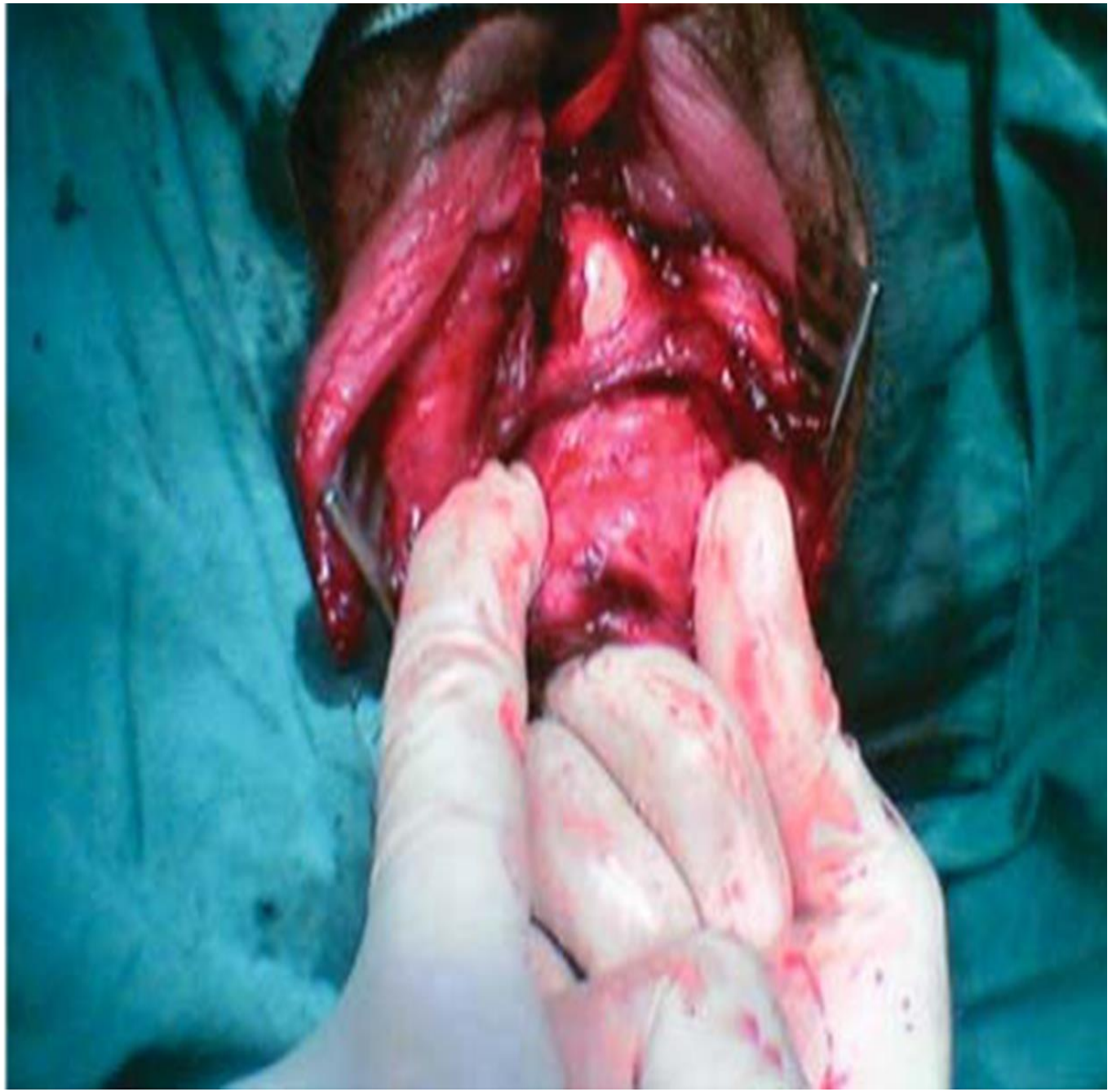


FIGURE 2.2. Classification of perineal trauma depicted in a schematic representation of the anal sphincters.

-Isolated tears of the anal epithelium: (***button-hole***) without involvement of anal sphincters
- ***Rare***.

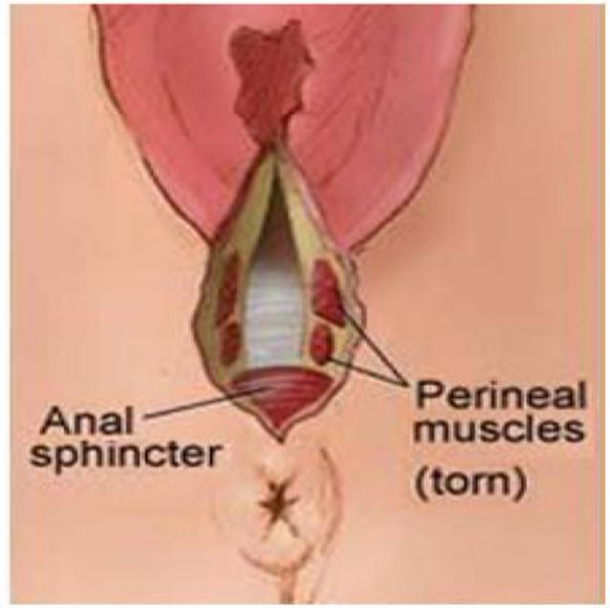
-If not recognised and repaired - lead to rectovaginal fistula
Evidence level 3 NICE



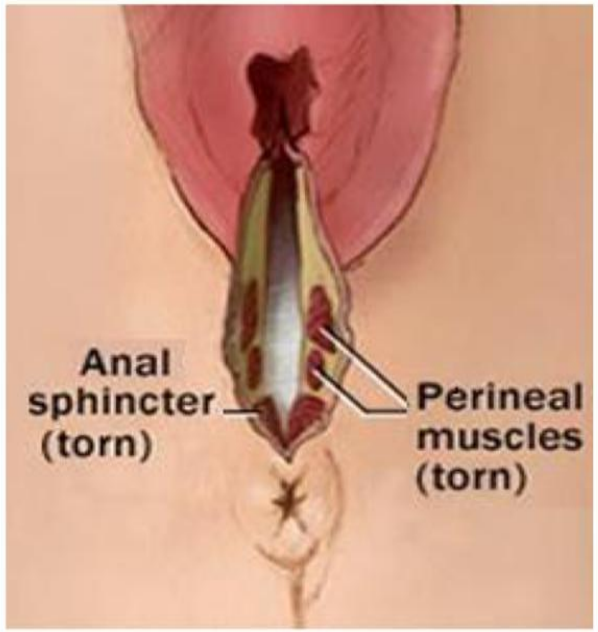
If there is any doubt about the degree of third-degree tear, classify it to the higher degree.

(✓) **NICE**

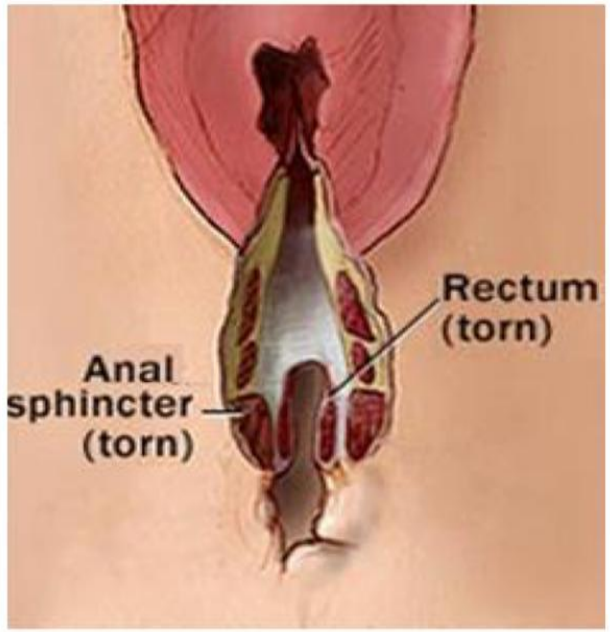
First Degree Perineal Tear



Second Degree Perineal Tear



Third Degree perineal tear



Fourth Degree Perineal Tear

midline(also known as median):

3 mm of the midline

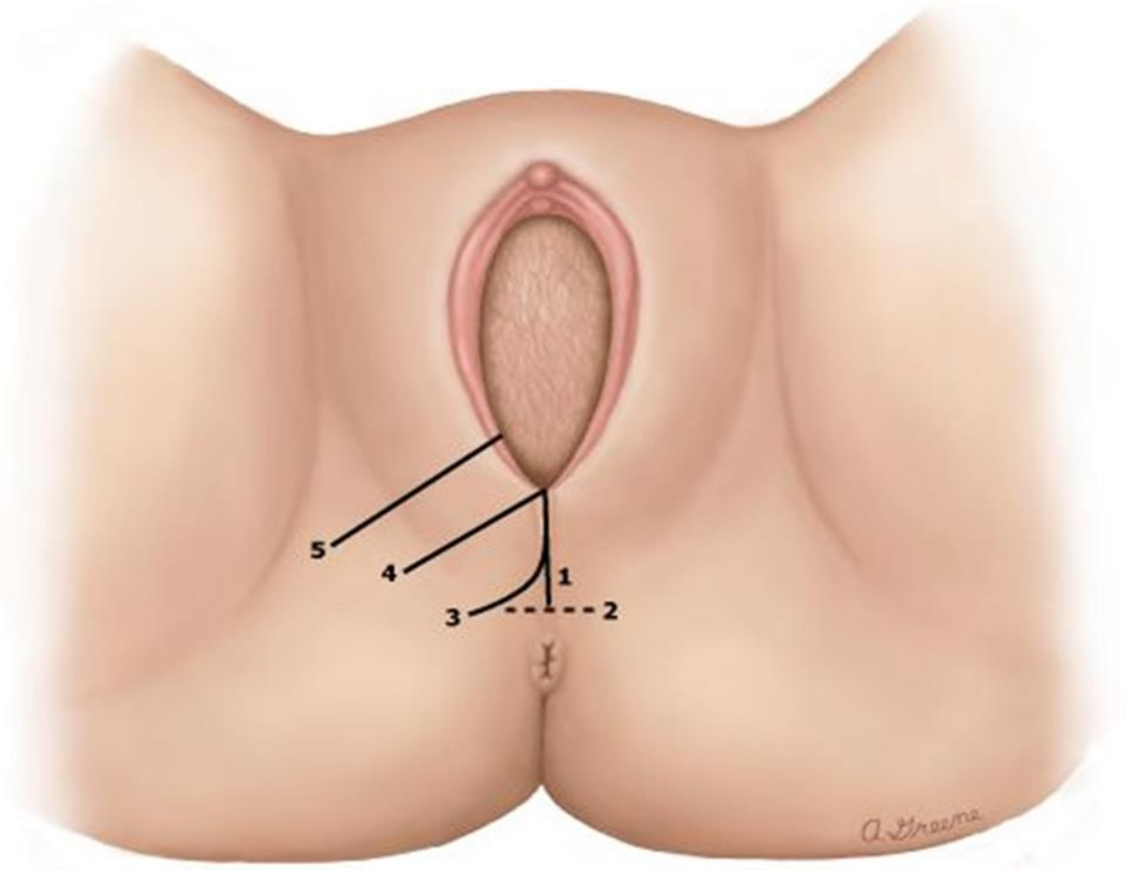
Extends downwards 0 - 25 degrees of the sagittal plane.

mediolateral :

3 mm of the midlinein

Directed laterally at an angle of 60 degrees from the midline towards the ischial tuberosity

Types of episiotomy incisions



1 = Median incision, 1+2 = "T" incision, 3 = "J" incision, 4 = Mediolateral incision, 5 = Lateral incision

ACOG 2016

Restrictive episiotomy use is recommended over routine episiotomy. Level A

Mediolateral episiotomy prefer over midline episiotomy

Mediolateral episiotomy increased likelihood of perineal pain and dyspareunia. Level B

clinical judgment *remains the best guide for use of this procedure*

NICE

TIMING OF EPISIOTOMY

up to date

Excessive blood loss : if too early

Protection of perineum compromised: if too late

perform the procedure with the expectation of delivering the fetus within the next three to four contractions

WILLIAMS

- when the head is visible during a contraction to a diameter of 3 to 4 cm
- In forceps delivery: after application of the blades

MEDIAN EPISIOTOMY (ACOG)

- Before fully crowning
- Only just before expulsion
- Clinical judgment of the obstetrician.

MEDIOLATERAL EPI (ACOG)

Just before delivery:
because tends to bleed more than medial

Effect of Episiotomy and Perineal Trauma on **Pelvic Floor Function?**

Vaginal delivery ➔ increased need for pelvic floor reconstruction surgery

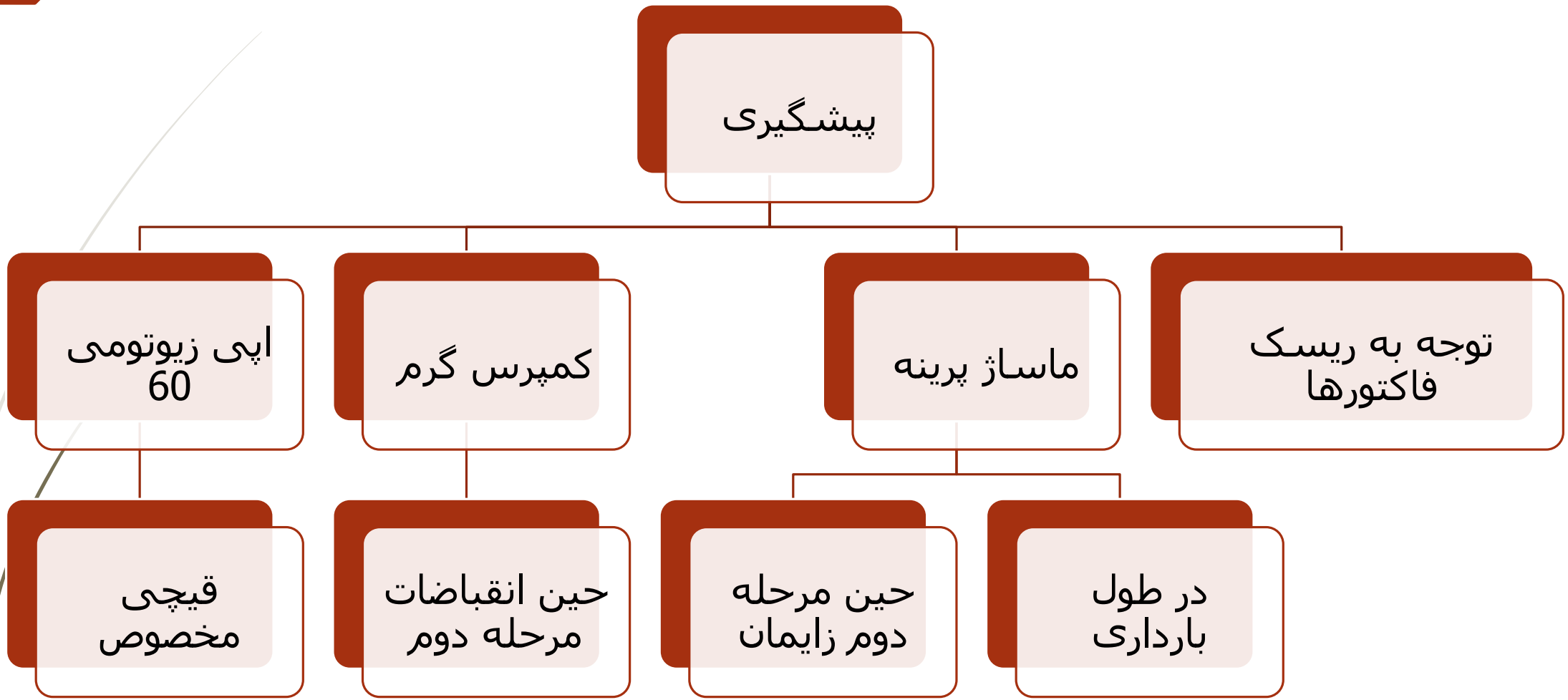
episiotomy ➔ unknown

6–11 years after a first delivery: dyspareunia or pelvic pain not associated with perineal laceration or episiotomy

6 months postpartum: history of a fourth-degree laceration reported worse bowel control 10 times more than a third-degree laceration (30.8% versus 3.6%, P<.001)

Can obstetric anal sphincter injury be

predicted prevented


پیشگیری
توجه به ریسک فاکتورها
ماساژ پرینه
در طول بارداری
حین مرحله دوم زایمان
کمپرس گرم
حین انقباضات مرحله دوم
اپی زیوتومی 60
قیچی مخصوص

Risk factors

- Asian ethnicity (OR 2.27)
- birth weight greater than 4 kg (OR 2.27)
- nulliparity (RR 6.97)
- shoulder dystocia (OR 1.90)
- occipito-posterior position (RR 2.44)

NICE

- prolonged second stage of labour

  - duration of second stage between 2 and 3 hours (RR 1.47)
  - duration of second stage between 3 and 4 hours (RR 1.79)
  - duration of second stage more than 4 hours (RR 2.02)

NICE

-instrumental delivery:

- ventouse delivery without episiotomy (OR 1.89)
- ventouse delivery with episiotomy (OR 0.57)
- forceps delivery without episiotomy (OR 6.53)
- forceps delivery with episiotomy (OR 1.34)

NICE

-midline episiotomy (OR 3.82)

-labor induction (OR 1.08)

-labor augmentation (OR 1.95)

-epidural anesthesia (OR 1.95)

-familial factors (mother or sister) (RR 1.9)

-Protective effect of episiotomy is conflicting. (level C)

-Mediolateral episiotomy should be considered in instrumental deliveries. (level D)

-Where episiotomy is indicated, the mediolateral technique : 60 degrees (level D)

NICE

A 60-degree episiotomy from the centre of the introitus results in a post-delivery angle of 45 degrees.

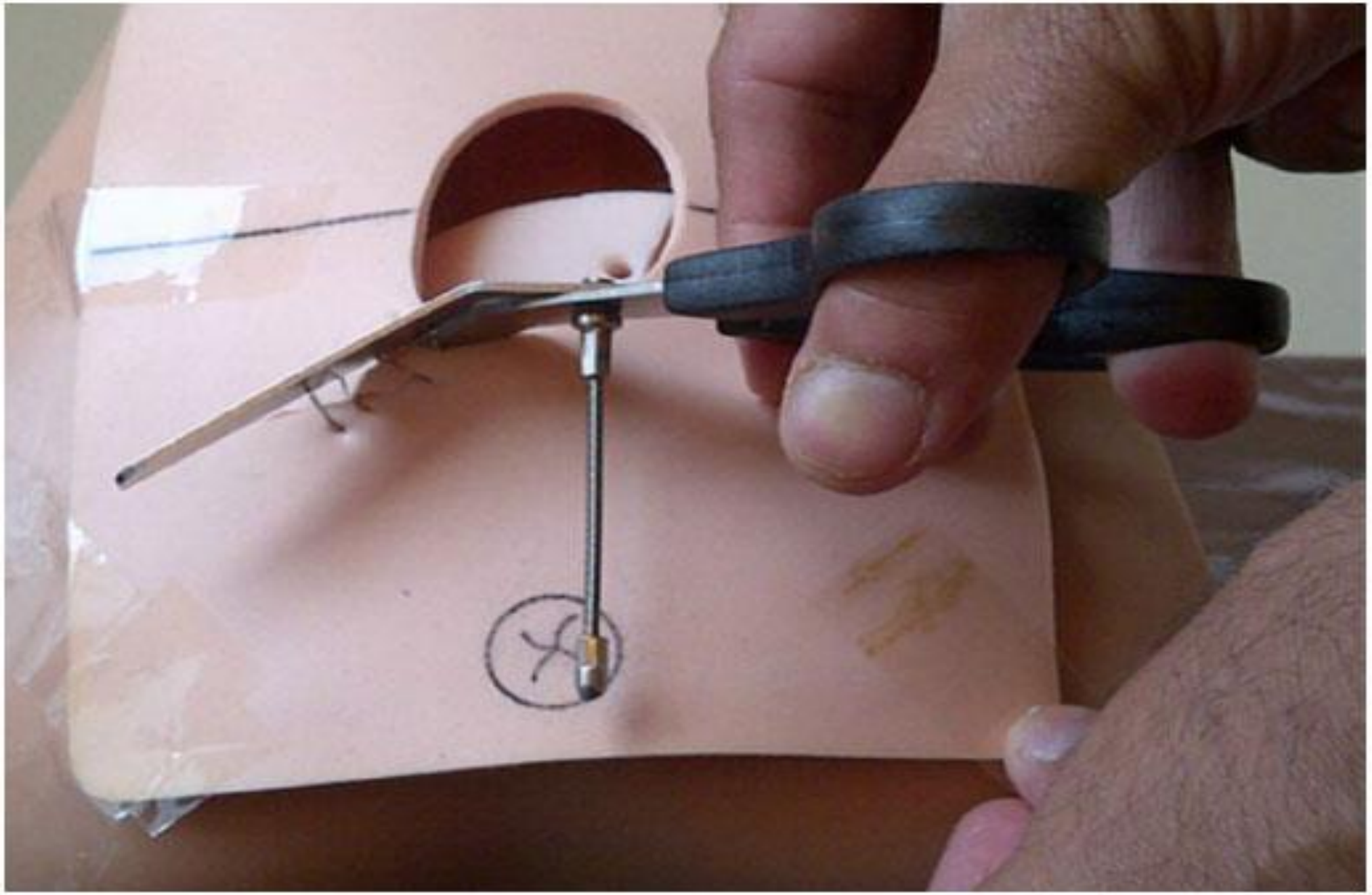
None of the midwives and only 22% of doctors were able to perform a truly mediolateral episiotomy.

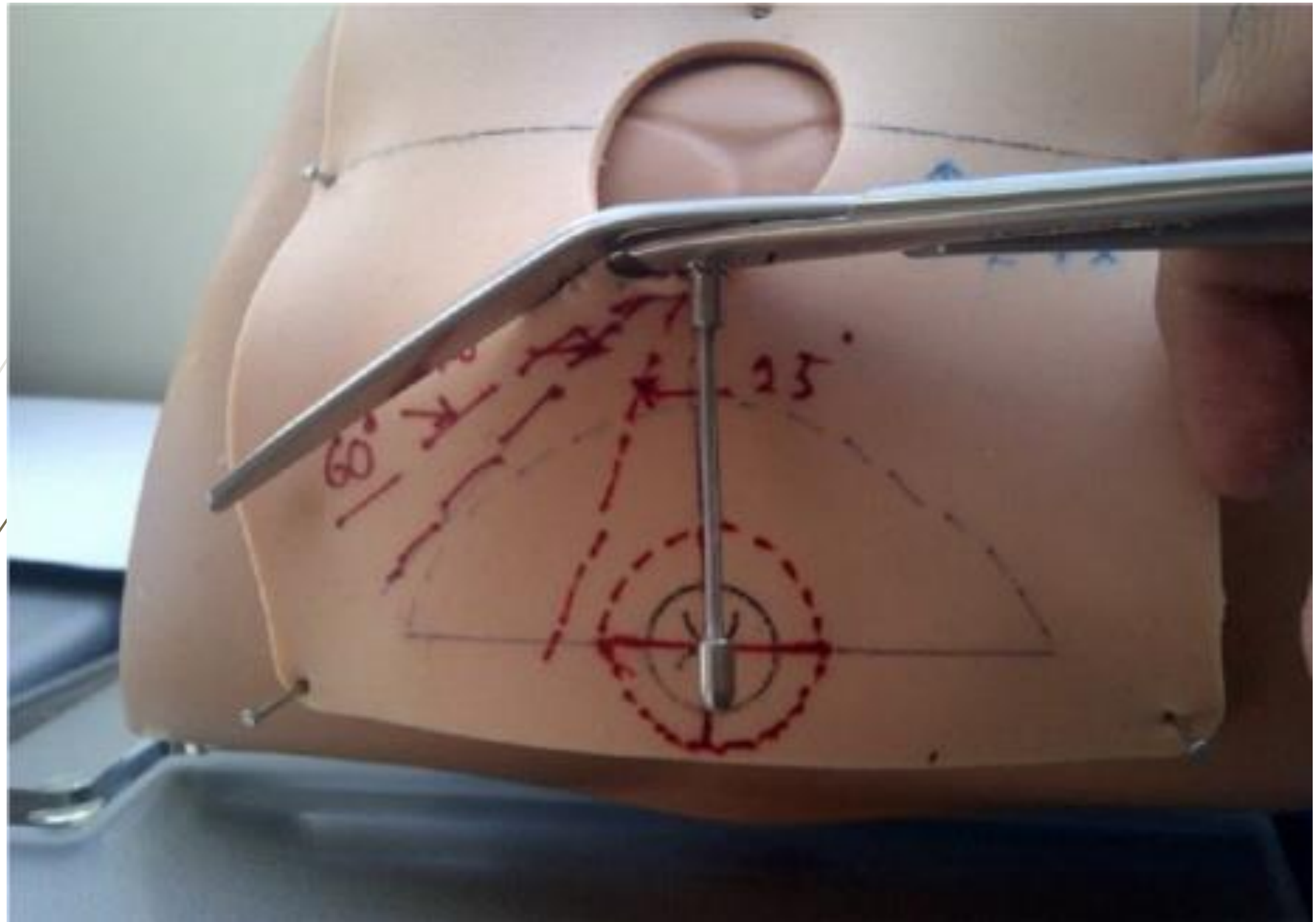
Only 13% of episiotomies were at a post-delivery angle of 40 degrees or more.

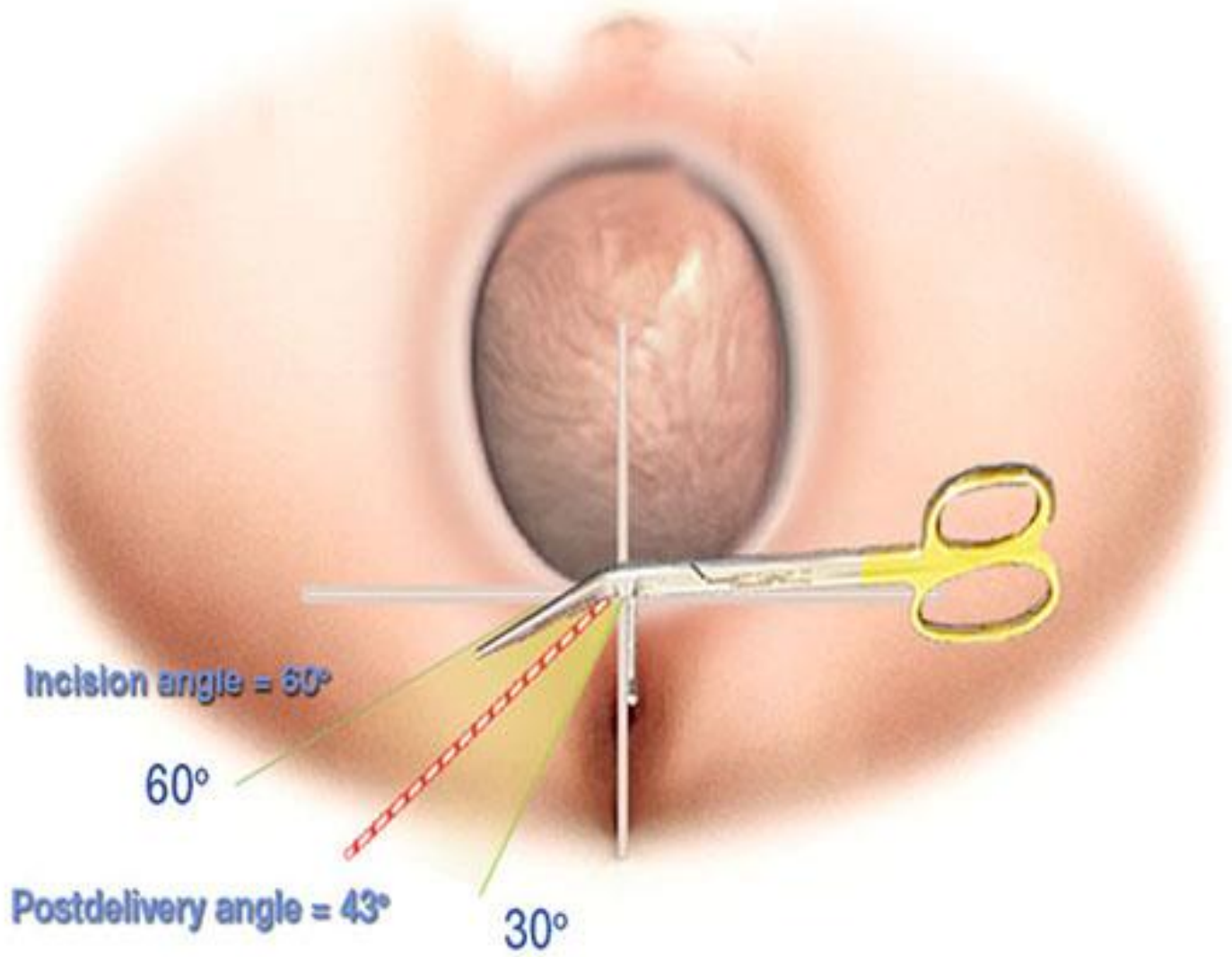
Special scissors designed to achieving the correct angle.

Braun-stadler

Episcissors-60




60°
25°


Incision angle = 60°
60°
Postdelivery angle = 43°
30°

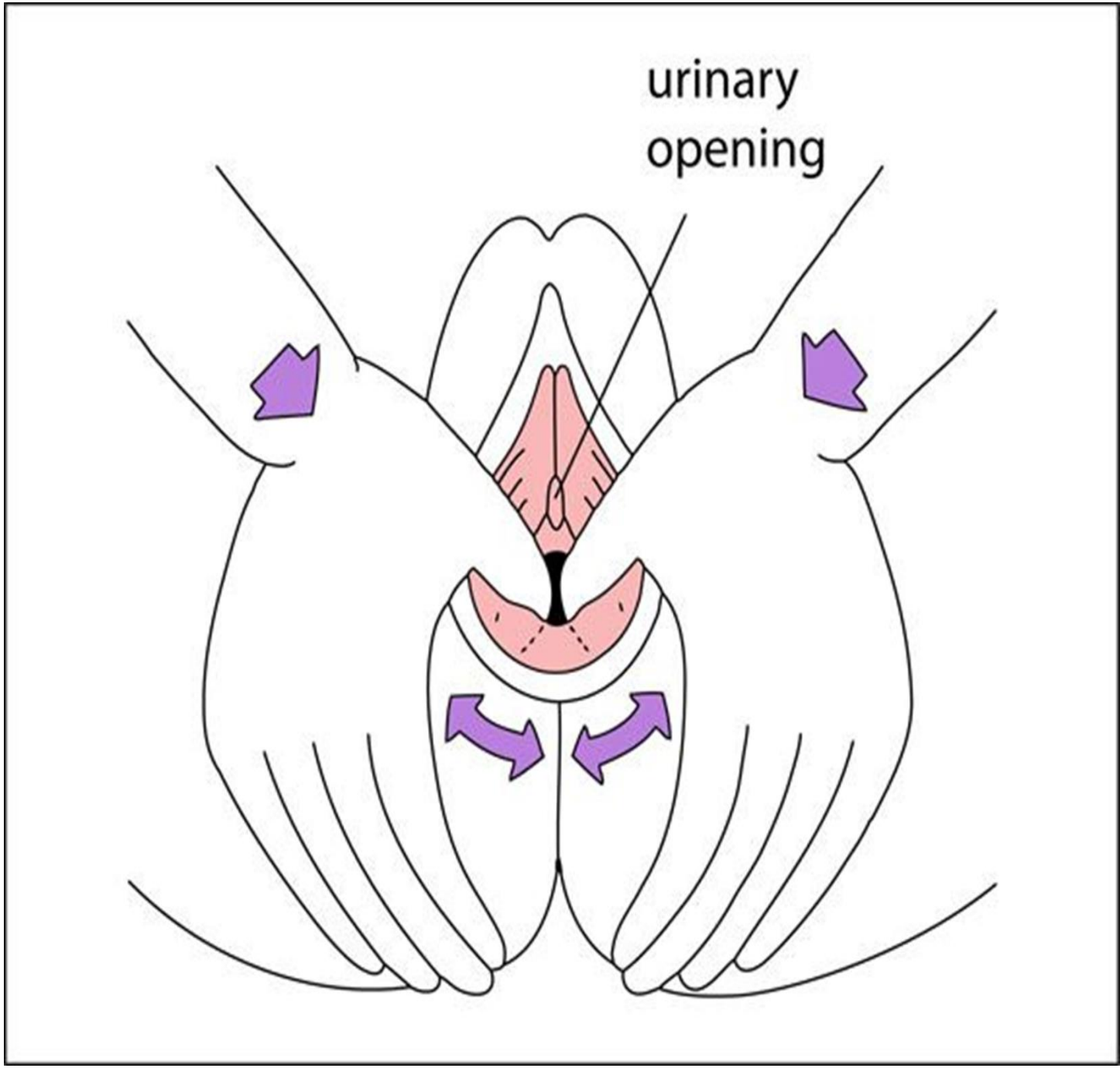
Intrapartum Perineal Massage

-Perineal massage during the second stage of labor may help reduce third-degree and fourth-degree lacerations (Level B) ACOG

- decrease perineal muscular resistance

- Antenatal: digital perineal massage from 34 weeks

- Intrapartum: during the second stage of labor



Antepartum Perineal Massage

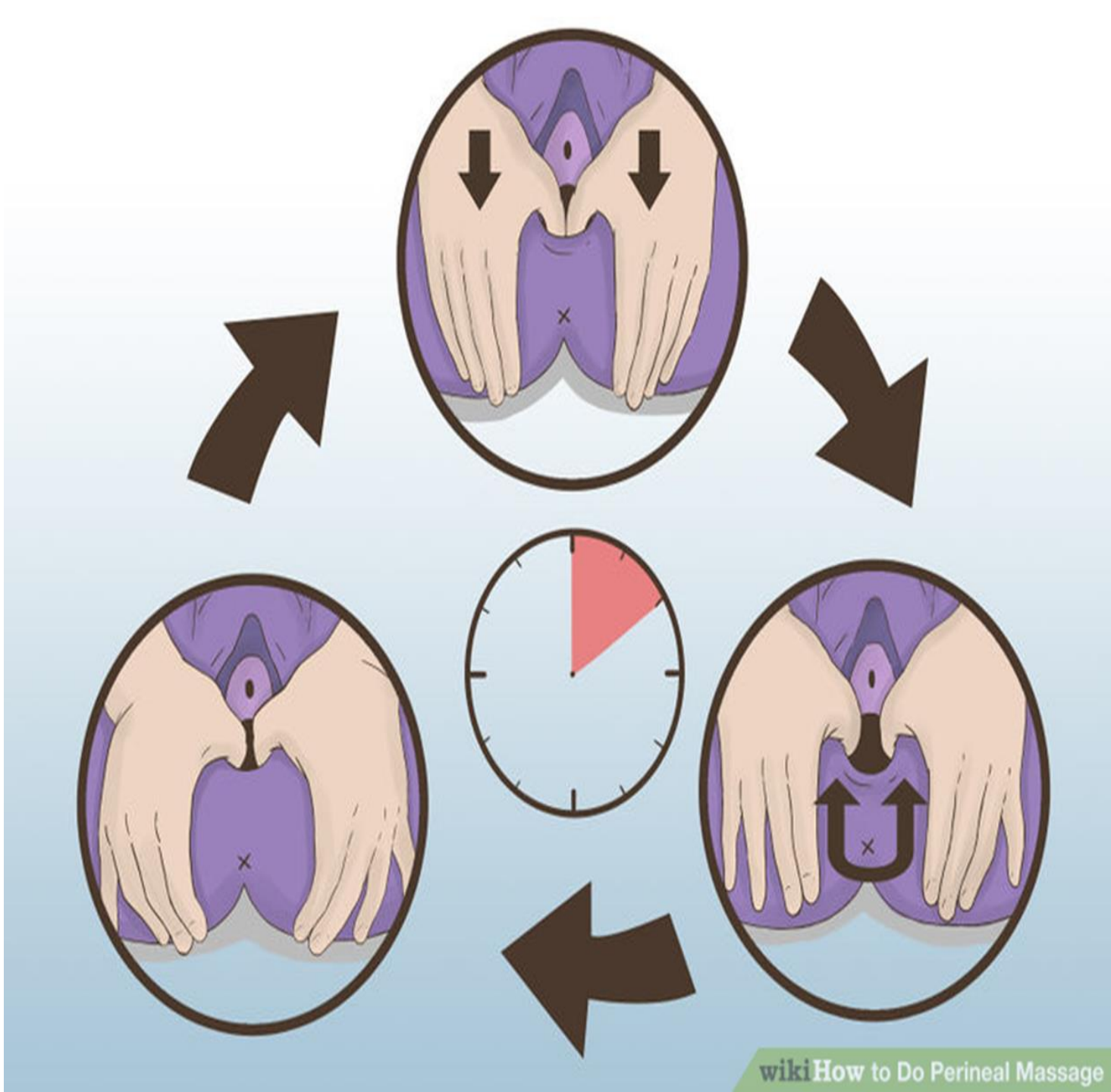
In an analysis of four trials (2,497 women) digital perineal massage from 34 weeks was associated with modest reduction in perineal trauma that required repair with suture (RR 0.91) and decreased episiotomy (RR 0.84) in women without previous vaginal birth.

Only women who previously had a vaginal delivery reported a statistically significant reduction in the incidence of pain at 3 months postpartum

- Lubricant (almond oil or water-soluble jelly).

- Try not to get too much oil in the vagina as it can disturb the normal balance.

-Place your thumbs shallowly into the vagina (no more than 3 to 4 cm)



perineal Support

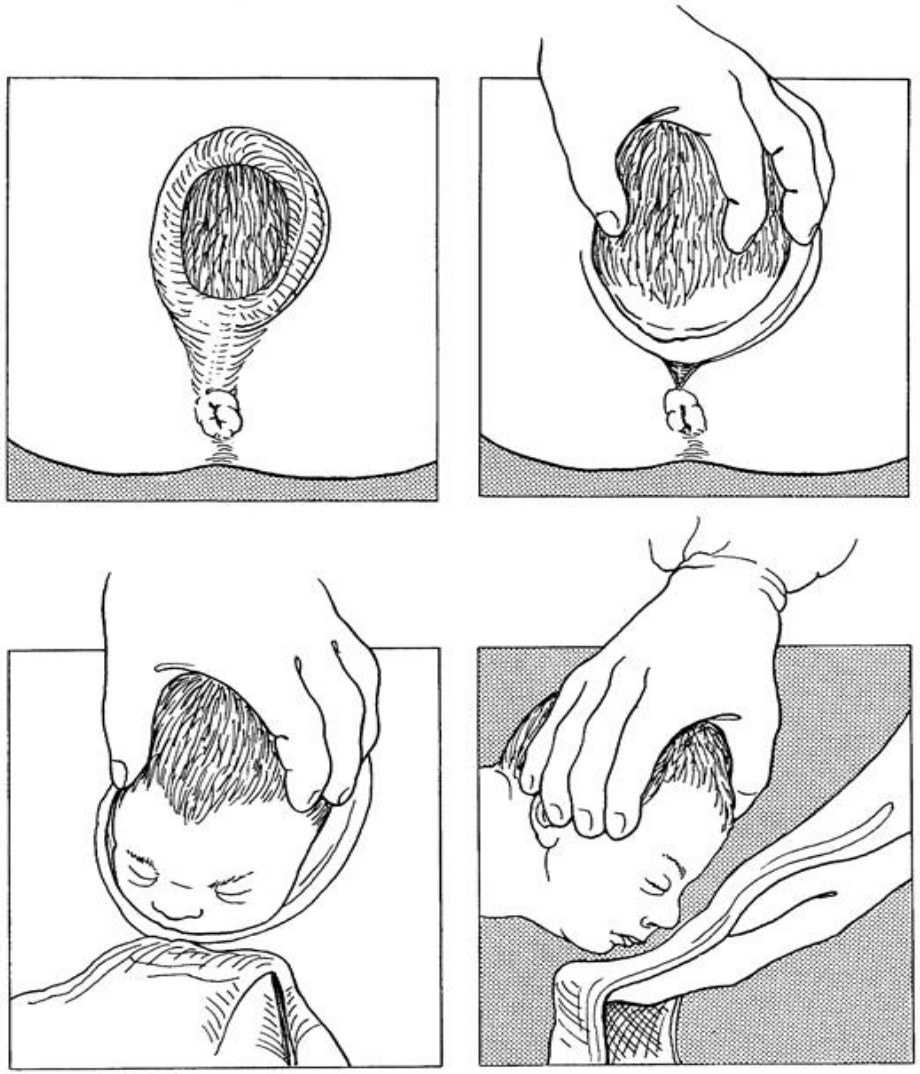
ACOG: Hands on over hands off

Current evidence is insufficient to recommend a specific practice

NICE: Perineal protection at crowning can be protective. (Level C)

1. Left hand slowing down the delivery of the head.
2. Right hand protecting the perineum.
3. NOT pushing
4. Think about episiotomy*(level 2)*

The best method is unclear.



Warm Compresses (Level A)

- Reduces incidence of OASIS
- During the second stage
- Acceptable to women
- Cheap
- Absence of harm
- Reduced pain
- Reduced incidence of urinary incontinence

Perineal Outcomes and Maternal Comfort Related to the Application of Perineal Warm Packs in the Second Stage of Labor: A Randomized Controlled Trial

Hannah G. Dahlen, RN, RM, BN(Hons), M(CommN), PhD, Caroline S.E. Homer, RN, RM, PhD, Margaret Cooke, RN, RM, PhD, Alexis M. Upton, RN, RM, RPN, BN, Rosalie Nunn, RN, RM, GradDipAppSc, MMid, and Belinda Brodrick, RN, RM, GradDip(NMan)

ABSTRACT: Background: *Perineal warm packs are widely used during childbirth in the belief that they reduce perineal trauma and increase comfort during late second stage of labor. The aim of this study was to determine the effects of applying warm packs to the perineum on perineal trauma and maternal comfort during the late second stage of labor.* **Methods:** *A randomized controlled trial was undertaken. In the late second stage of labor, nulliparous women (n = 717) giving birth were randomly allocated to have warm packs (n = 360) applied to their perineum or to receive standard*

Procedure

Water 45° - 59°C

Perineal pad 38° - 44°C

Pad was resoaked

Water s replaced every 15 minutes

- Birthing Position

(lateral position with delayed pushing were more likely to deliver with an intact perineum compared with lithotomy positions and pushing at complete dilatation)

- Delayed Pushing

Cochrane Library

Cochrane Database of Systematic Reviews

Perineal techniques during the second stage of labour for reducing perineal trauma (Review)

Aasheim V, Nilsen ABV, Lukasse M, Reinar LM

We included eight trials involving 11,651 randomised women. There was a significant effect of warm compresses on reduction of third- and fourth-degree tears (RR: 0.48, 95%).

significant effect towards favoring massage versus hands off to reduce third- and fourth-degree tears (RR 0.52, 95%).

Which obstetric lacerations should be repaired?

Repair periclitoral, periurethral, labial lacerations IF bleeding or distort anatomy. Expert opinion

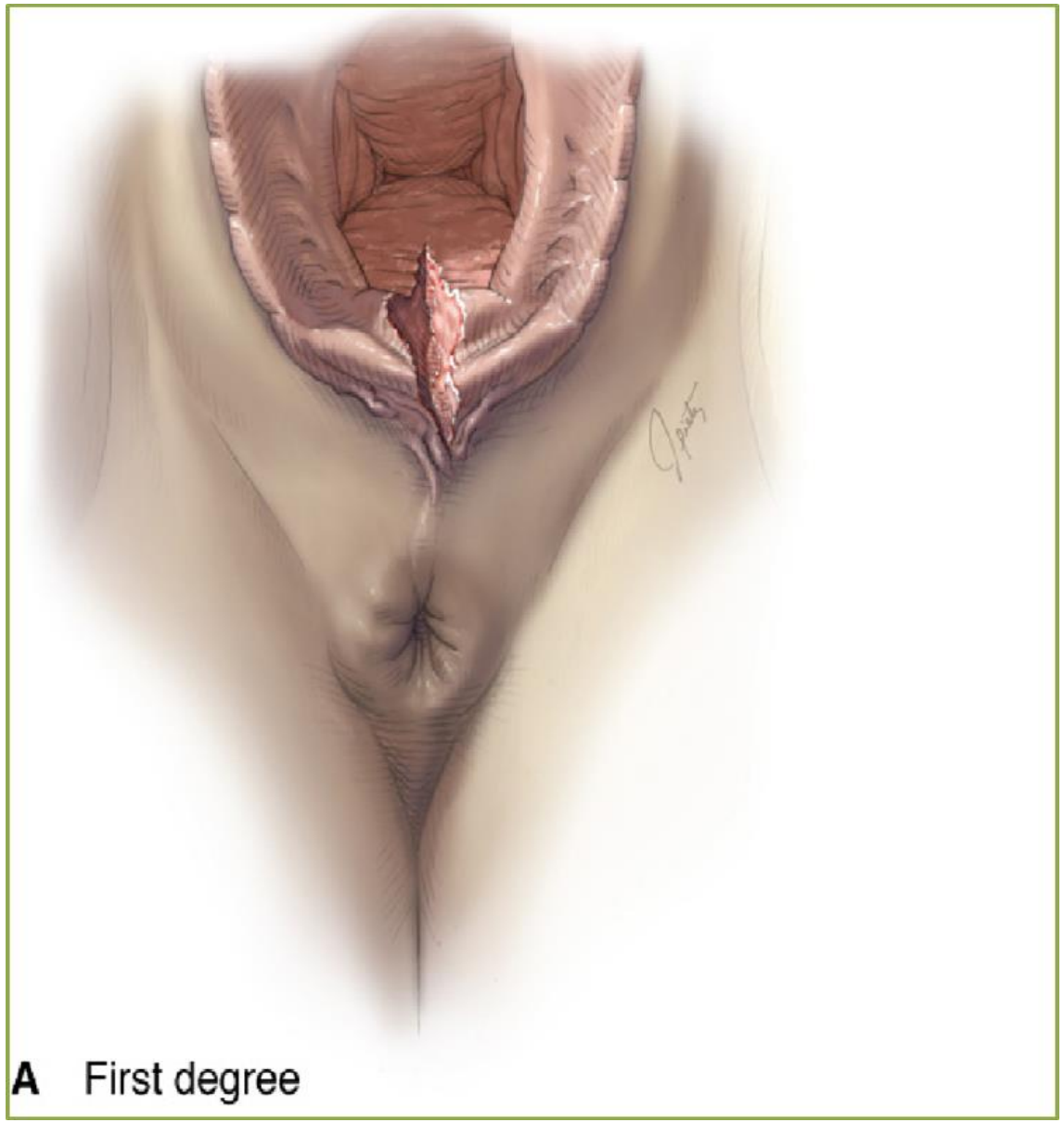
Clinical judgment to repair a first-degree or second-degree laceration.

First-degree laceration: standard suture or adhesive glue Level B

Continuous suturing

Absorbable synthetic (polyglactin)

Rapidly absorbing

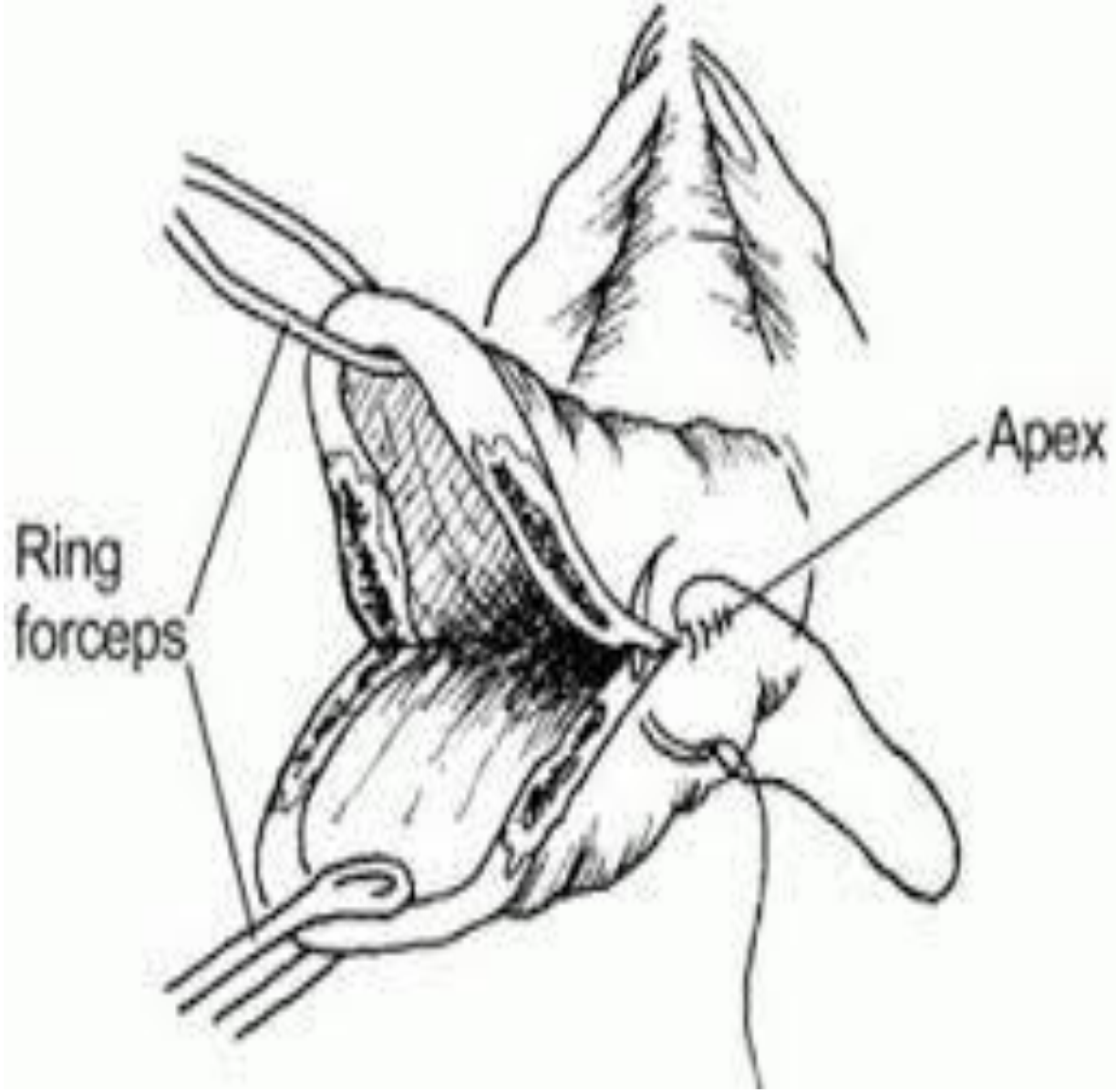


cervical lacerations

The first suture: Above the apex of the laceration

Interrupted or continuous locking sutures

2-0 chromic or polyglactin



How can the identification of obstetric anal sphincter injuries be improved?

Endoanal ultrasonography (occult OASIS)

False-positive

Education programs to improve identification of overt OASIS

All women having a vaginal delivery are at risk of sustaining OASIS or isolated rectal buttonhole tears. They should therefore be examined systematically, including a digital rectal examination, to assess the severity of damage, particularly prior to suturing. (✓) **NICE**

Making an Accurate Clinical Diagnosis

- clear visualization
- palpation (pill-rolling motion)
  - contract anal sphincter : gap felt anteriorly
  - absence of puckering on the perianal skin anteriorly

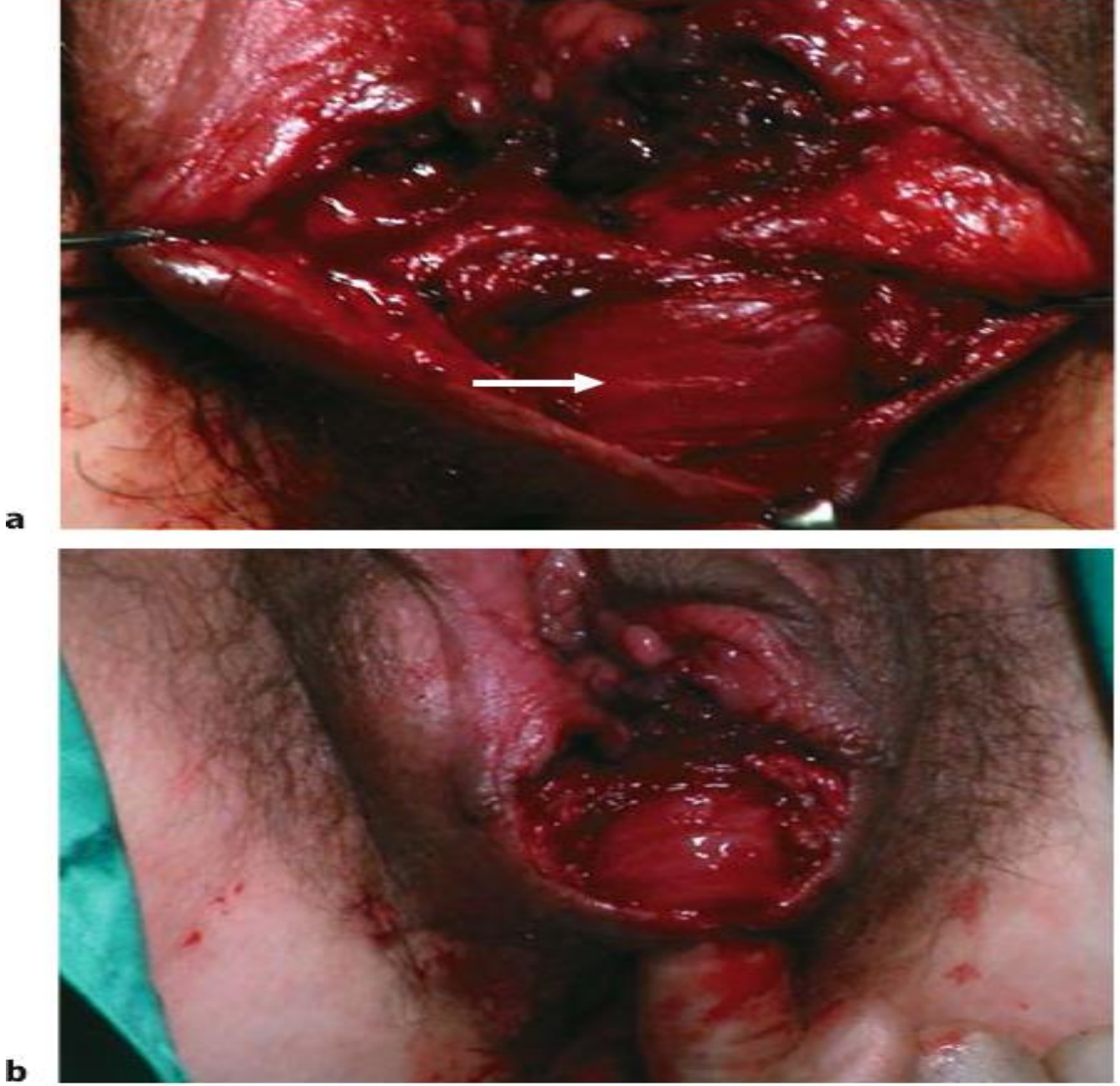


FIGURE 2.3. An intact anal sphincter (*arrow* in **a**) is demonstrated more clearly during a digital rectal examination (**b**).

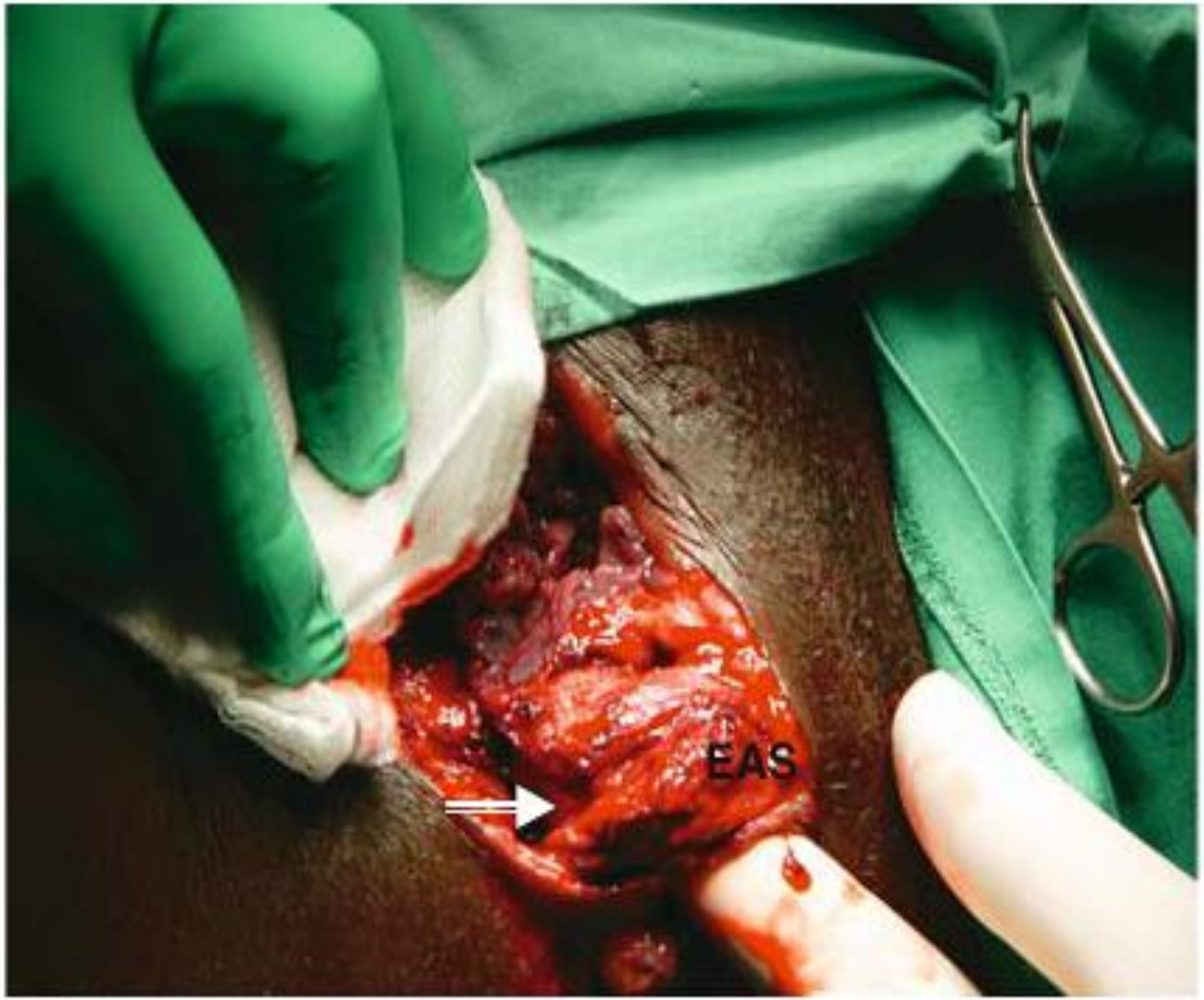


FIGURE 2.5. A partial tear (*arrow*) along the length of the external anal sphincter.

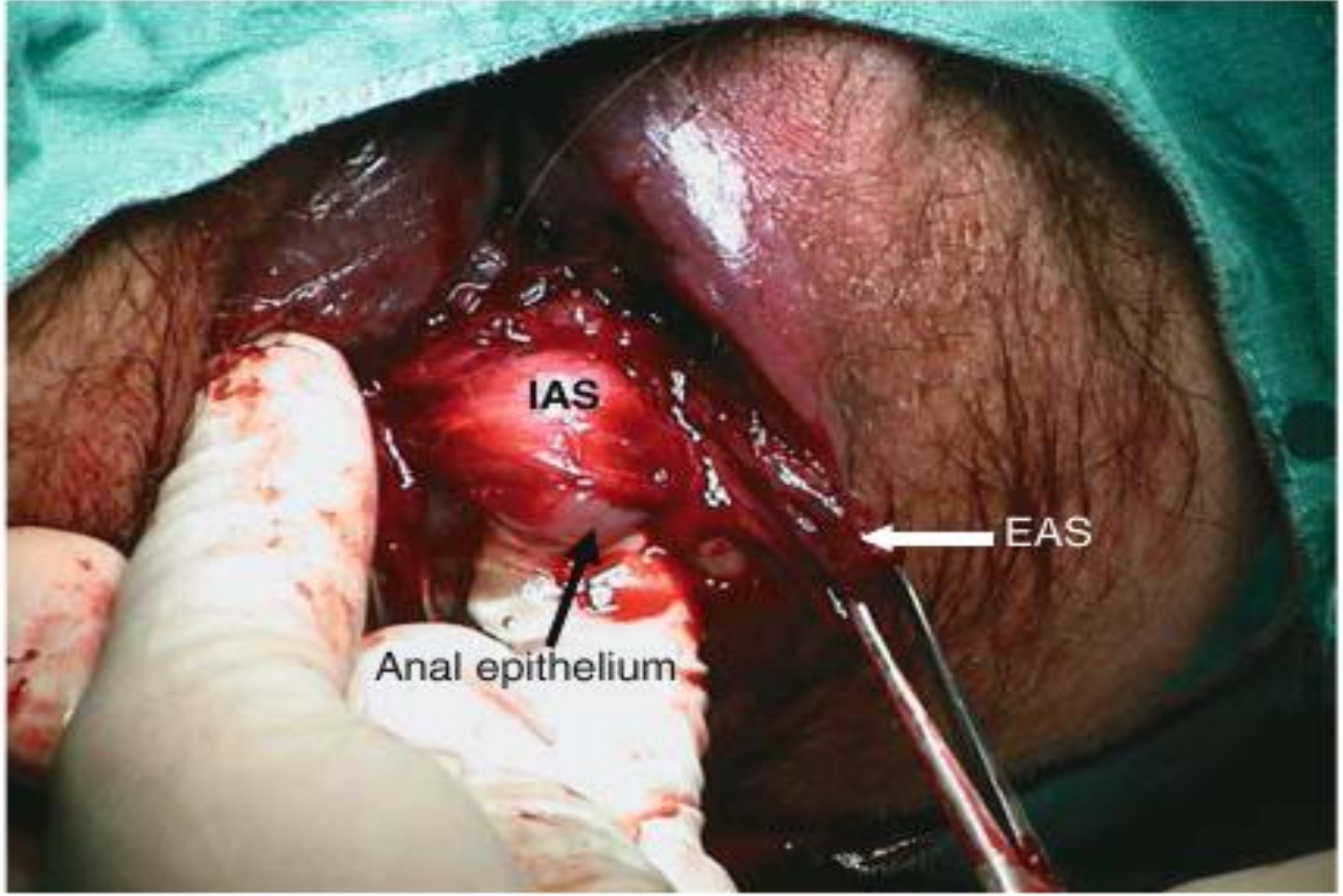


FIGURE 2.7. A grade 3b tear with an intact internal anal sphincter (*IAS*). The external sphincter (*EAS*) is being grasped with Allis forceps. Note the difference in appearance of the paler IAS and darker EAS.

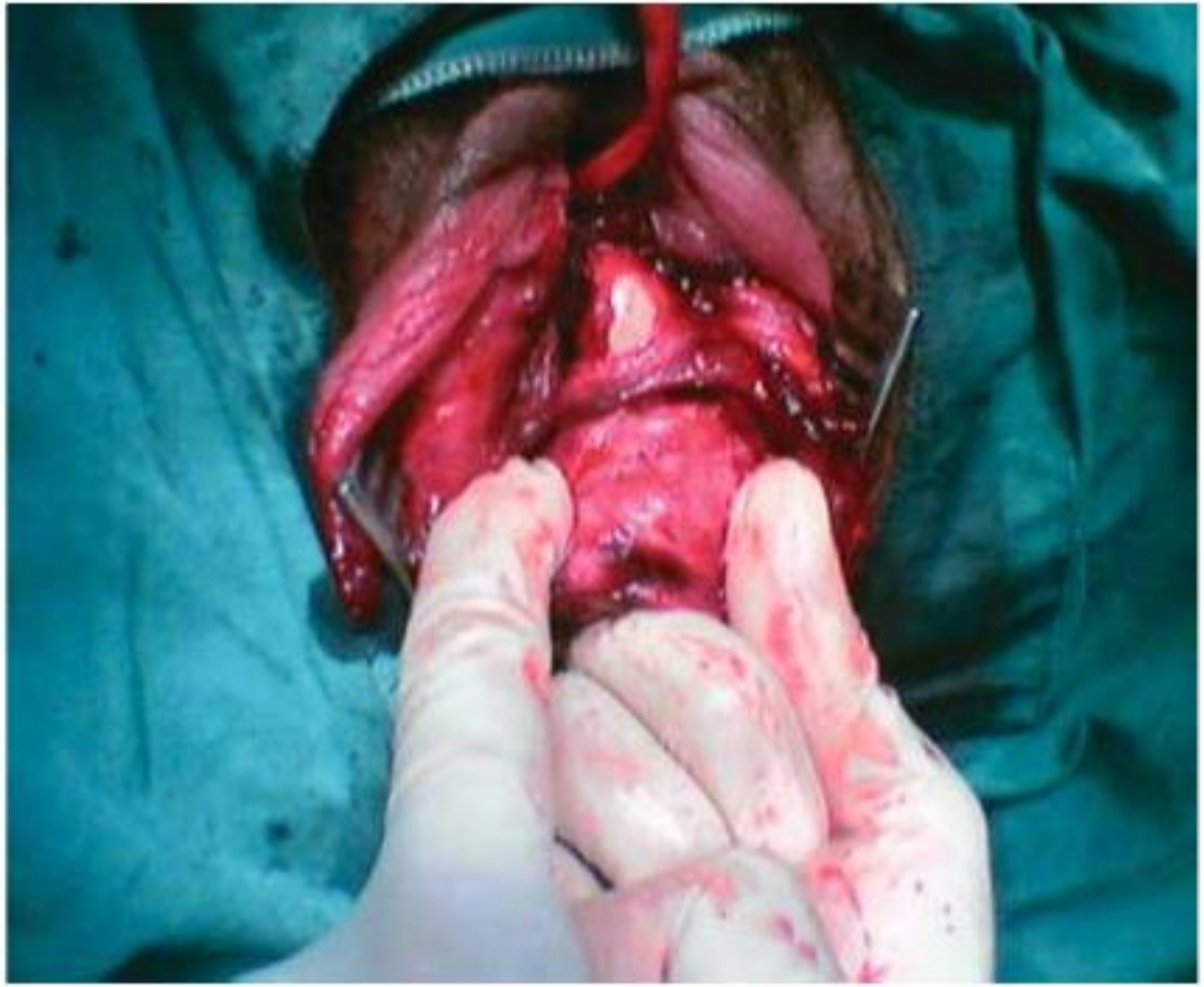
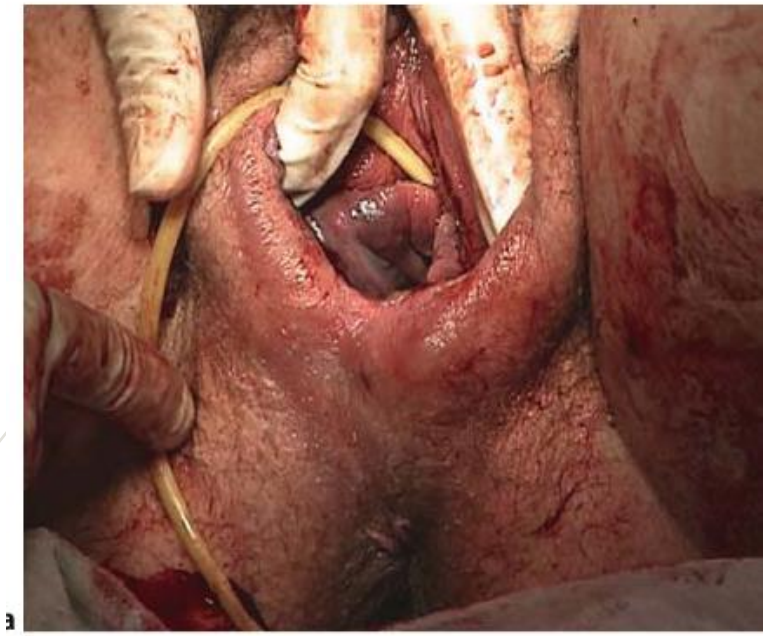
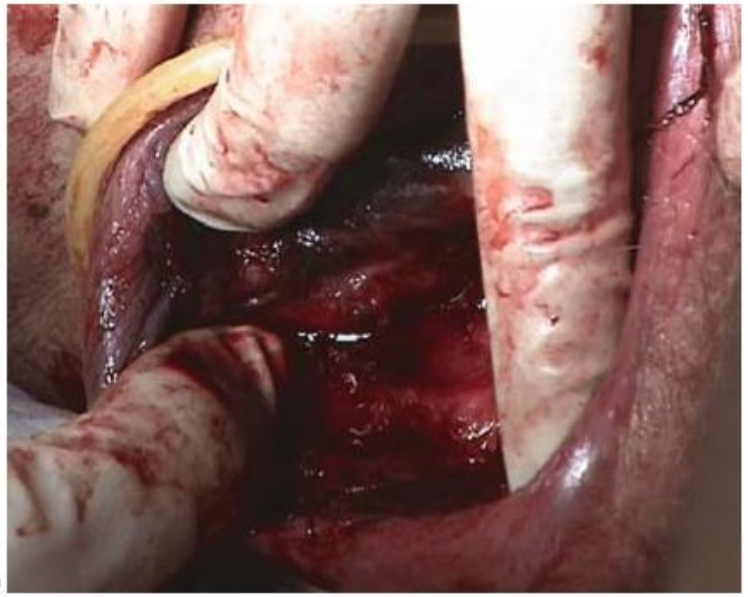
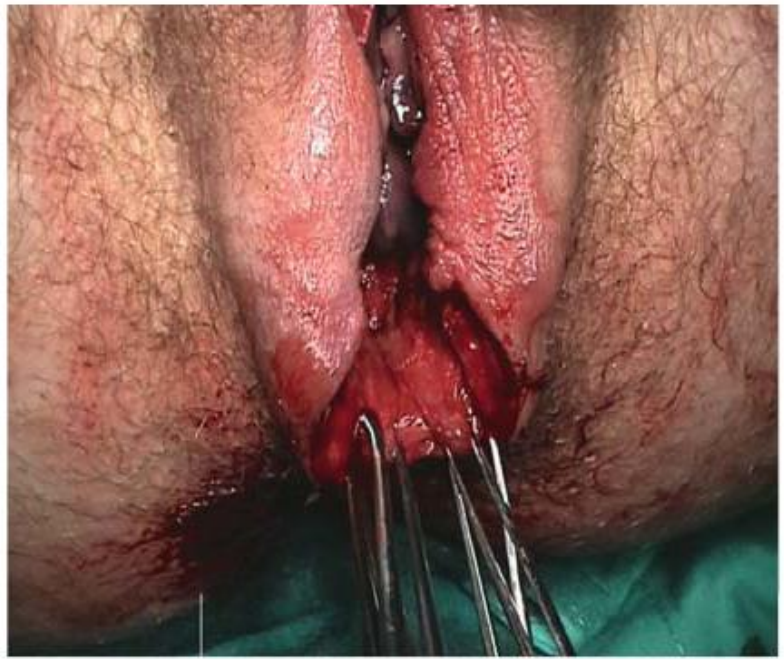


FIGURE 2.4. A "buttonhole" tear of the rectal mucosa (*arrow*) with an intact external anal sphincter demonstrated during a digital rectal examination (with permission).[12]







Third degree tear with
(a): an apparent intact perineum.
(b): A “bucket handle” tear is demonstrated behind the intact perineal skin
(c) :The torn external sphincter is shown

Anal sphincter is disrupted by shearing forces of fetal head descent with an otherwise intact perineum (up to date)

Who repair OASIS?

NICE:

-trained clinician

-trainee under supervision (Level D)

-Formal training in anal sphincter repair techniques should be an essential component of obstetric training. (✓)

-Involvement of a colorectal surgeon depend on:

local protocols

Expertise

Availability

the majority of colorectal surgeons are not familiar with acute OASIS.

NICE

Repair general principles: (✓)

-should take place in an operating theatre

-under regional or general anesthesia

-with good lighting

-with appropriate instruments

-vaginal pack

Which techniques should be used to accomplish the repair of the anorectal mucosa?

ACOG , NICE (Level D)

Expert opinion:

-Subcuticular running

-Interrupted sutures knots tied in the anal lumen

-4-0 or 3-0 polyglactin or chromic

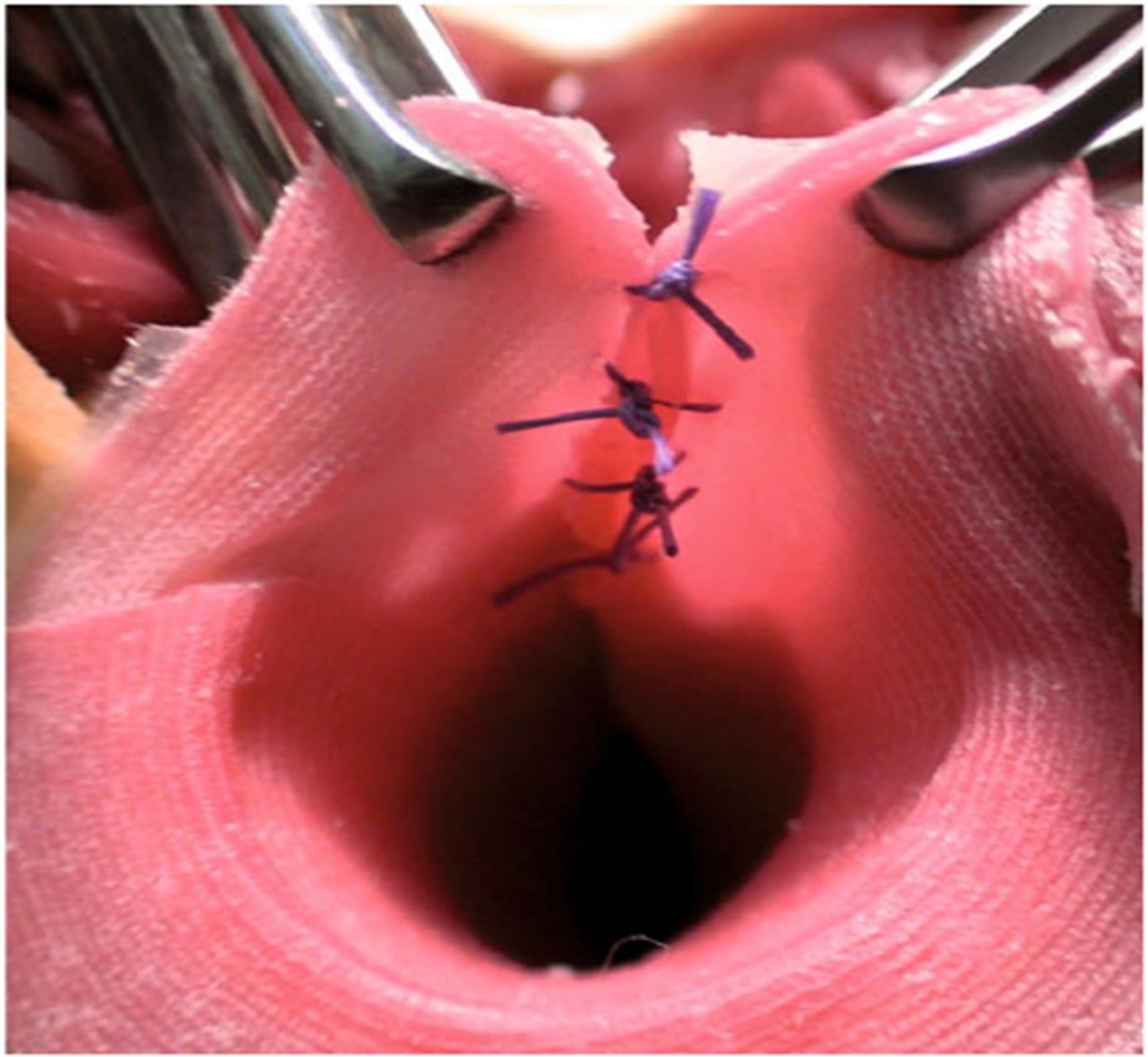


Fig. 13.4 Repair of the torn anal epithelium using interrupted Vicryl sutures

Second suture layer through the rectal muscularis

3-0 polyglactin suture

Running or interrupted fashion

Which techniques should be used to accomplish the repair of the internal anal sphincter?

NICE , ACOG

IAS :

Separately

Interrupted or mattress

without any attempt to overlap (Level C)

3-0 PDS or 2-0 polyglactin. (Level B)

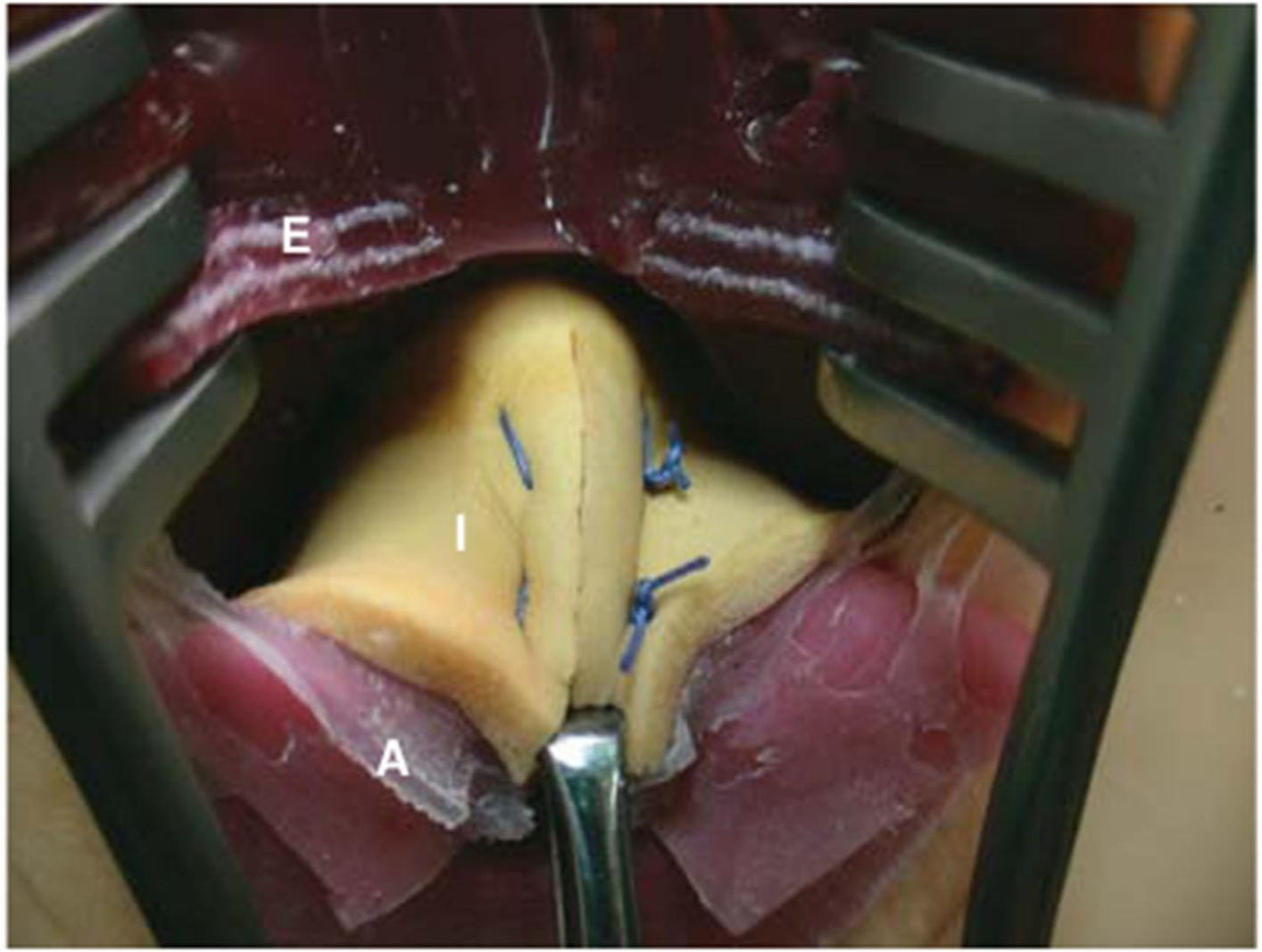


FIGURE 4.3. Internal anal sphincter (*I*) repair using mattress sutures demonstrated on a model (*E* external sphincter, *A* anal epithelium).

- Retracts laterally and superiorly - thickened, pale pink, shiny tissue just above the anal mucosa - refer to as perirectal fascia.

- It is important for achieving anal continence

Up to date

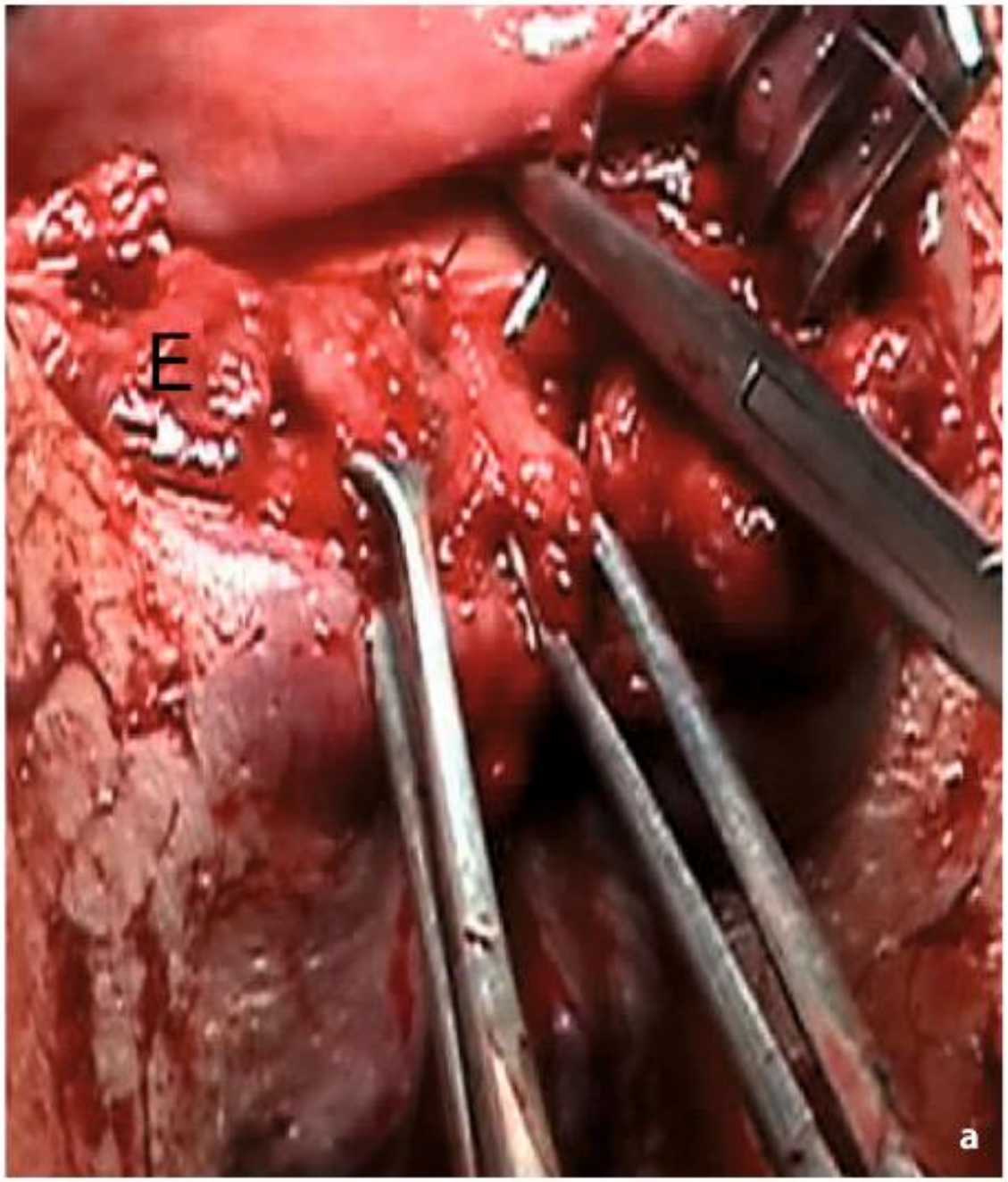
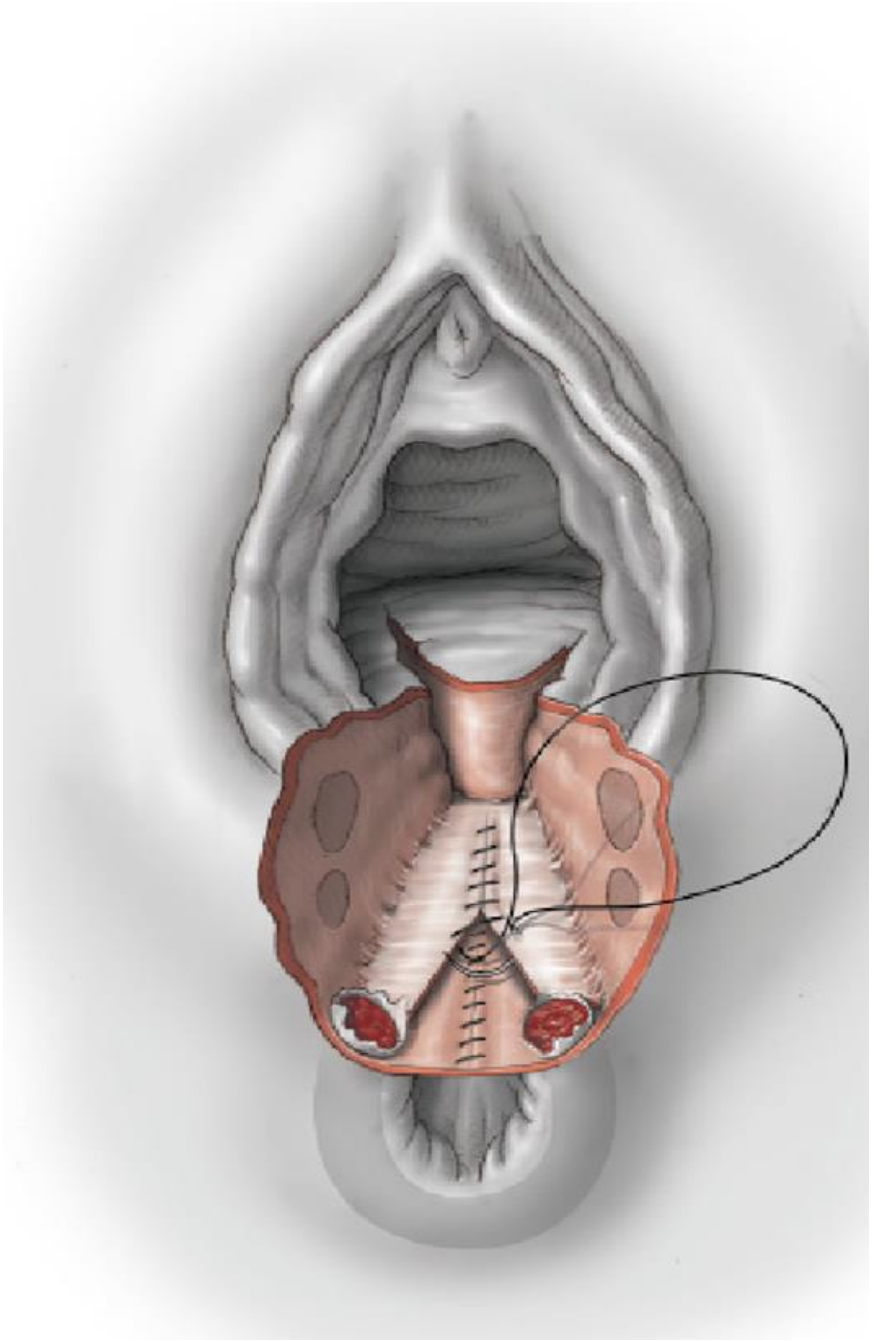
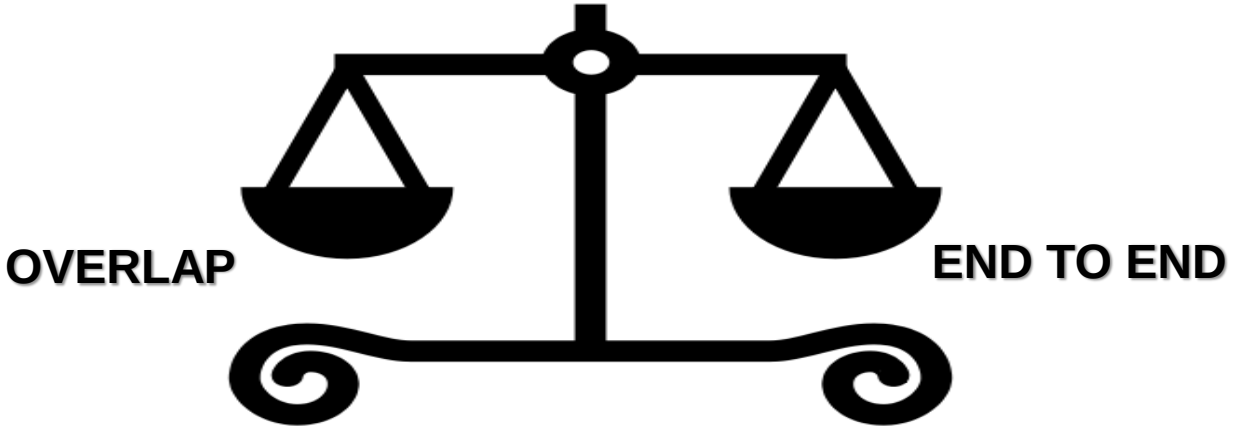


Fig. 13.5 **a** The torn ends of the internal sphincter being held by A



Which techniques should be used to repair the external anal sphincter?



12 months:

-no differences: perineal pain, dyspareunia, flatal incontinence

-lower incidence: fecal urgency (RR, 0.12) anal incontinence scores in overlap

36 months after repair:

no significant differences: quality of life , anal incontinence symptoms (flatal or fecal)

For full thickness EAS tear:

-Overlapping or an end-to-end - equivalent **NICE** **ACOG** **(Level A)**

-Allis

-fascial sheath

-3-0 polyglactin

- 3-0 polydioxanone

- 2-0 polyglactin **(Level B)** **ACOG** **NICE**

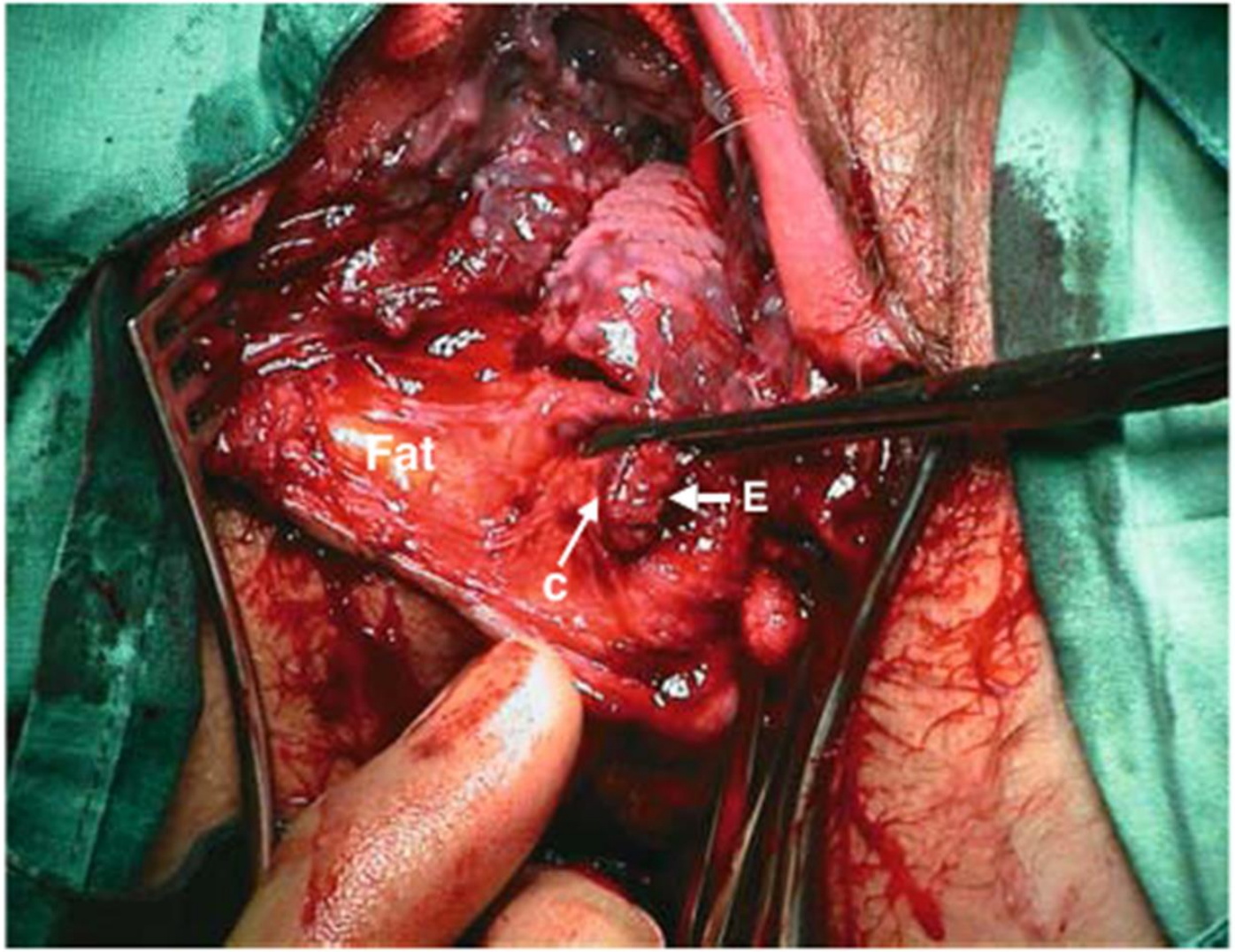
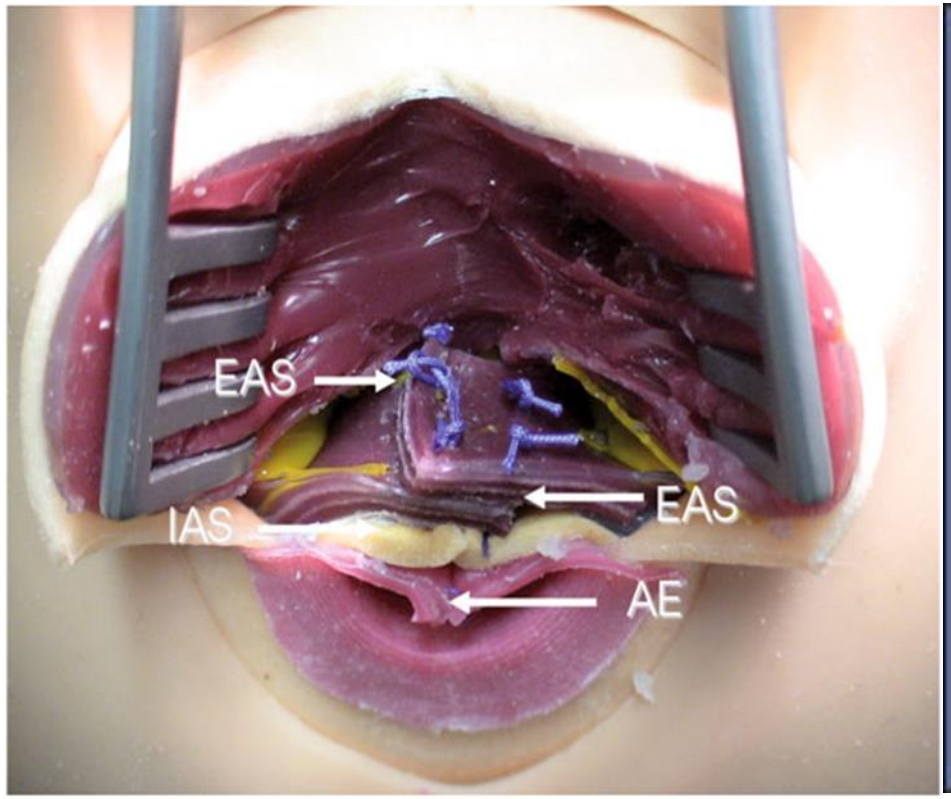
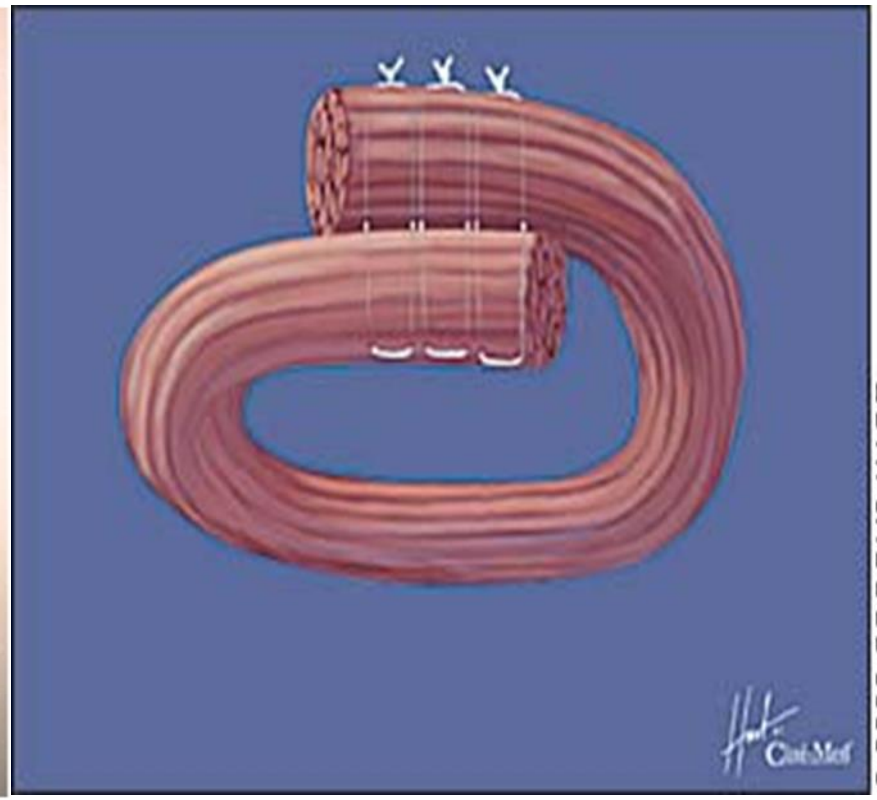


FIGURE 4.5. The external sphincter (*E*) grasped with Allis forceps is surrounded by the capsule (*C*) and lies medial to the ischio-anal fat.


EAS
EAS
IAS
AE


© 2003 BROOKS HART

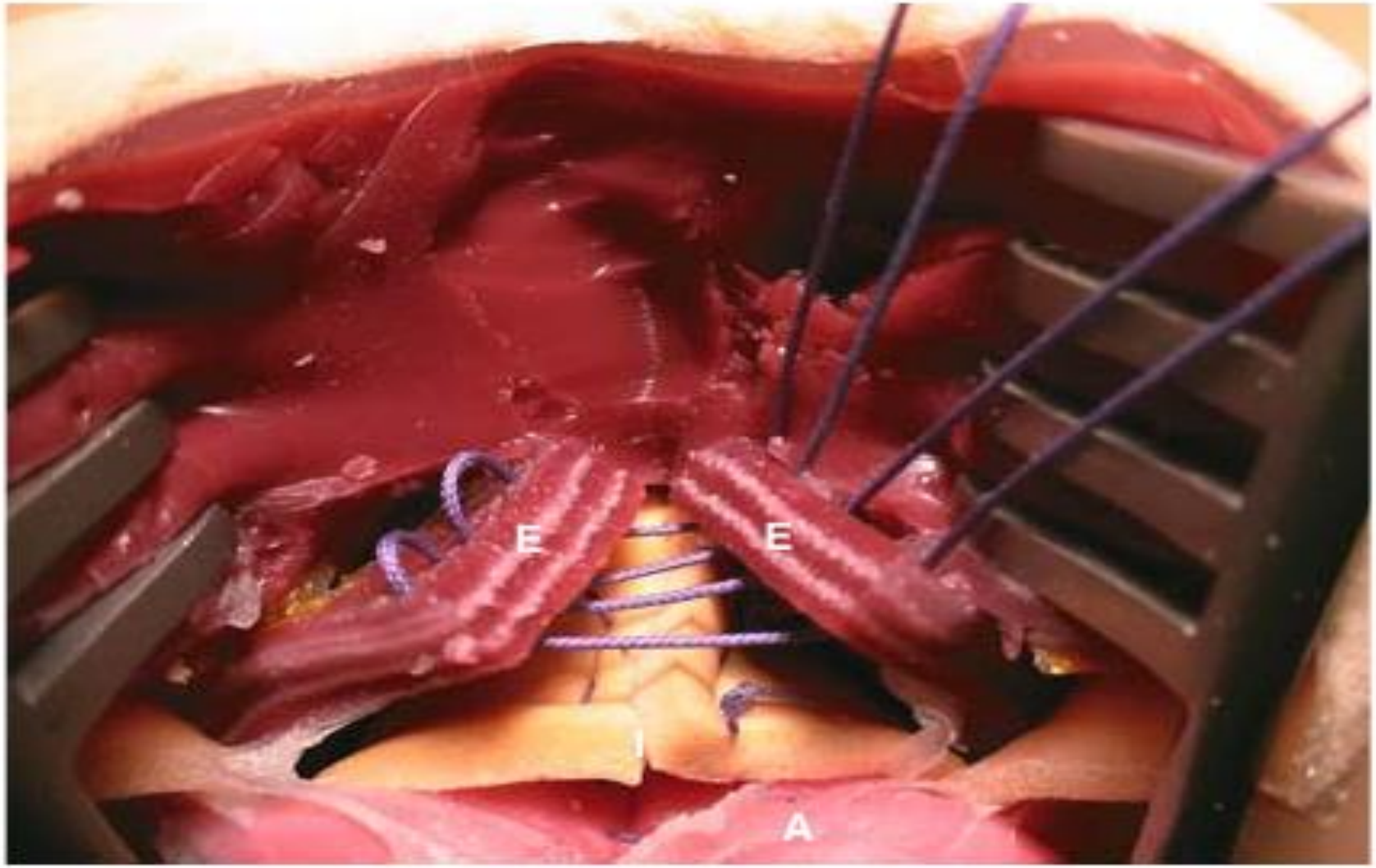
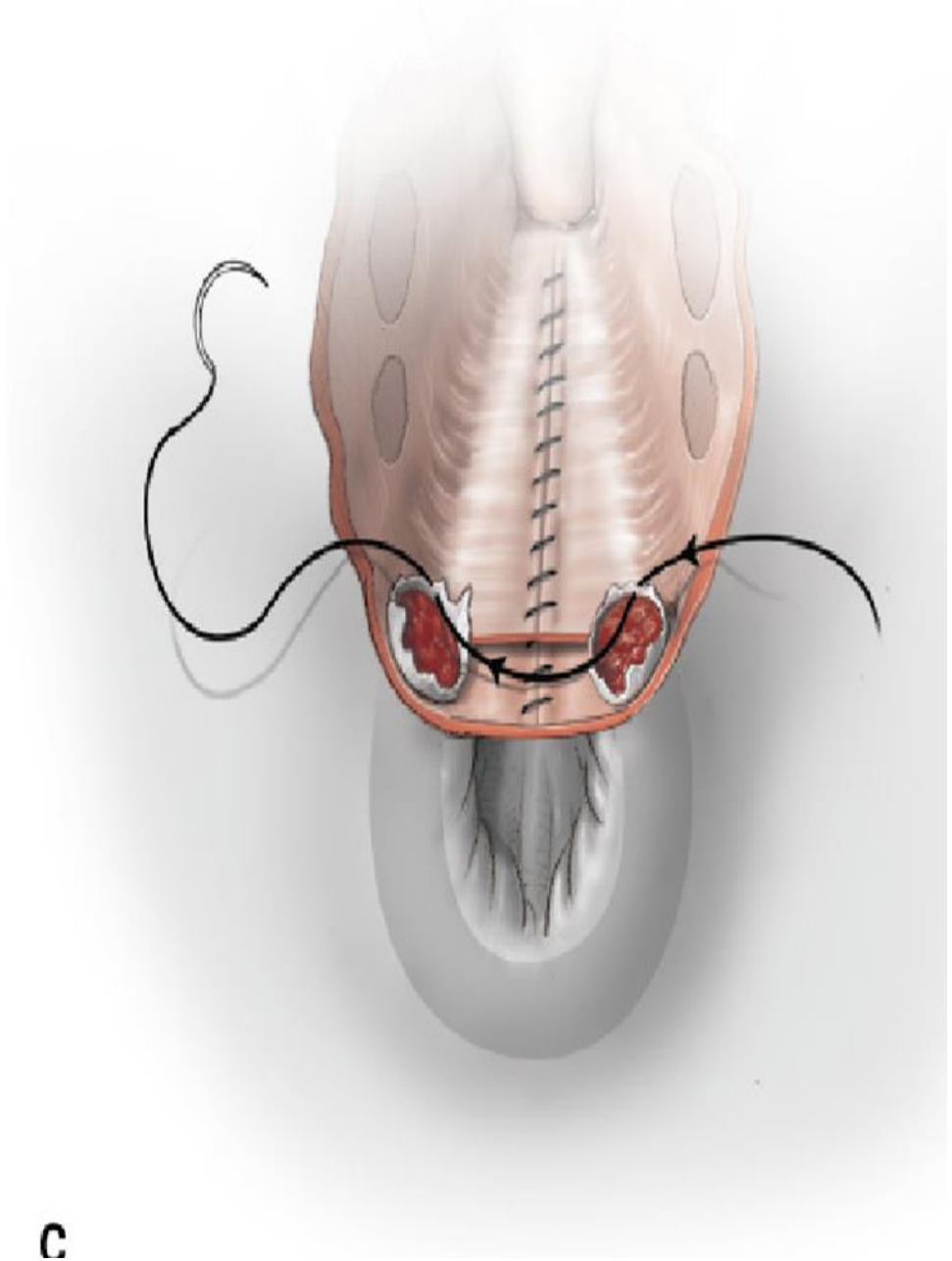


FIGURE 4.9. End-to-end repair of the external sphincter (*E*) using two mattress sutures (*I* internal sphincter, *A* anal epithelium).


C

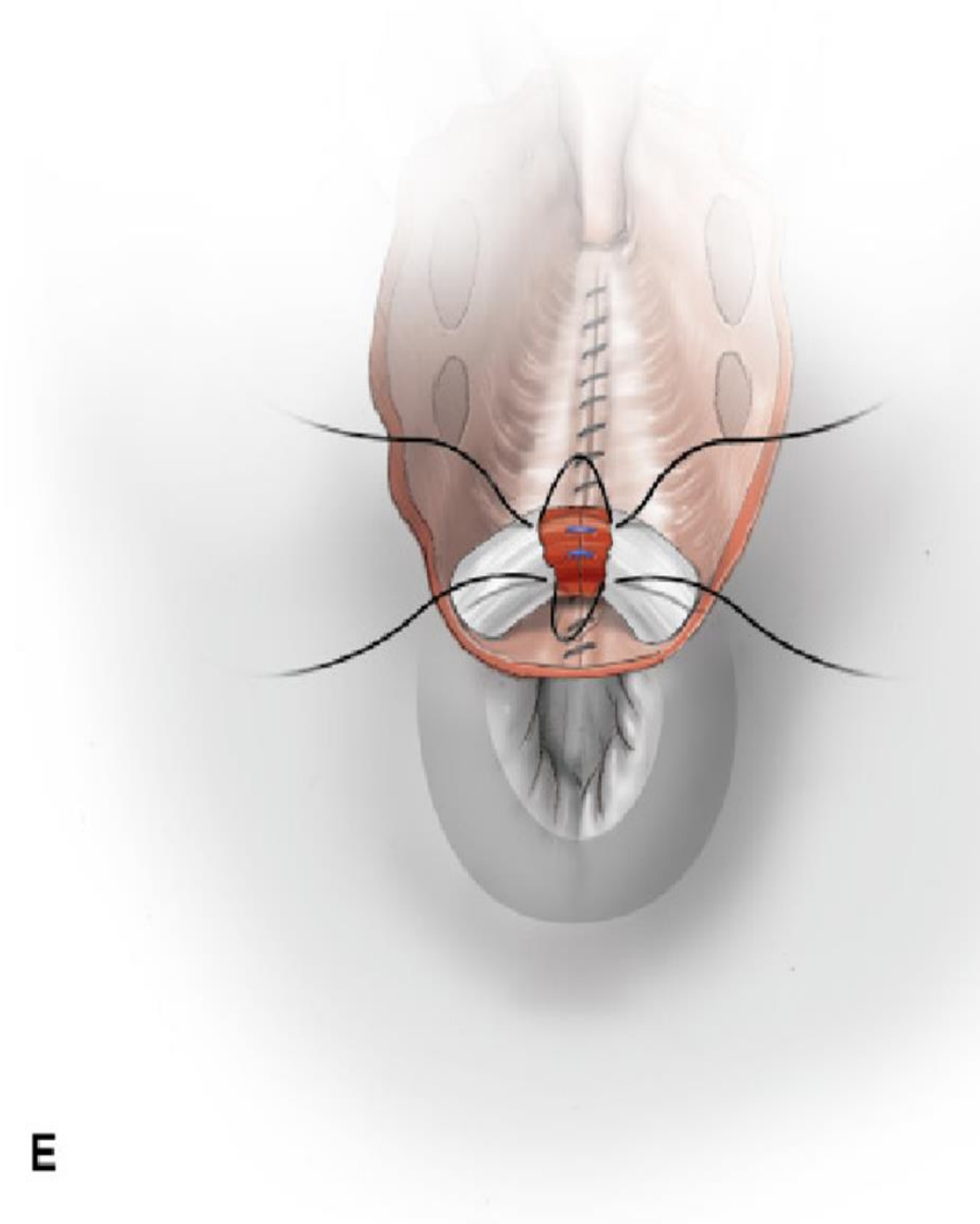

E

Figure of eight sutures should be avoided

cause tissue ischemia

(✓) **NICE**

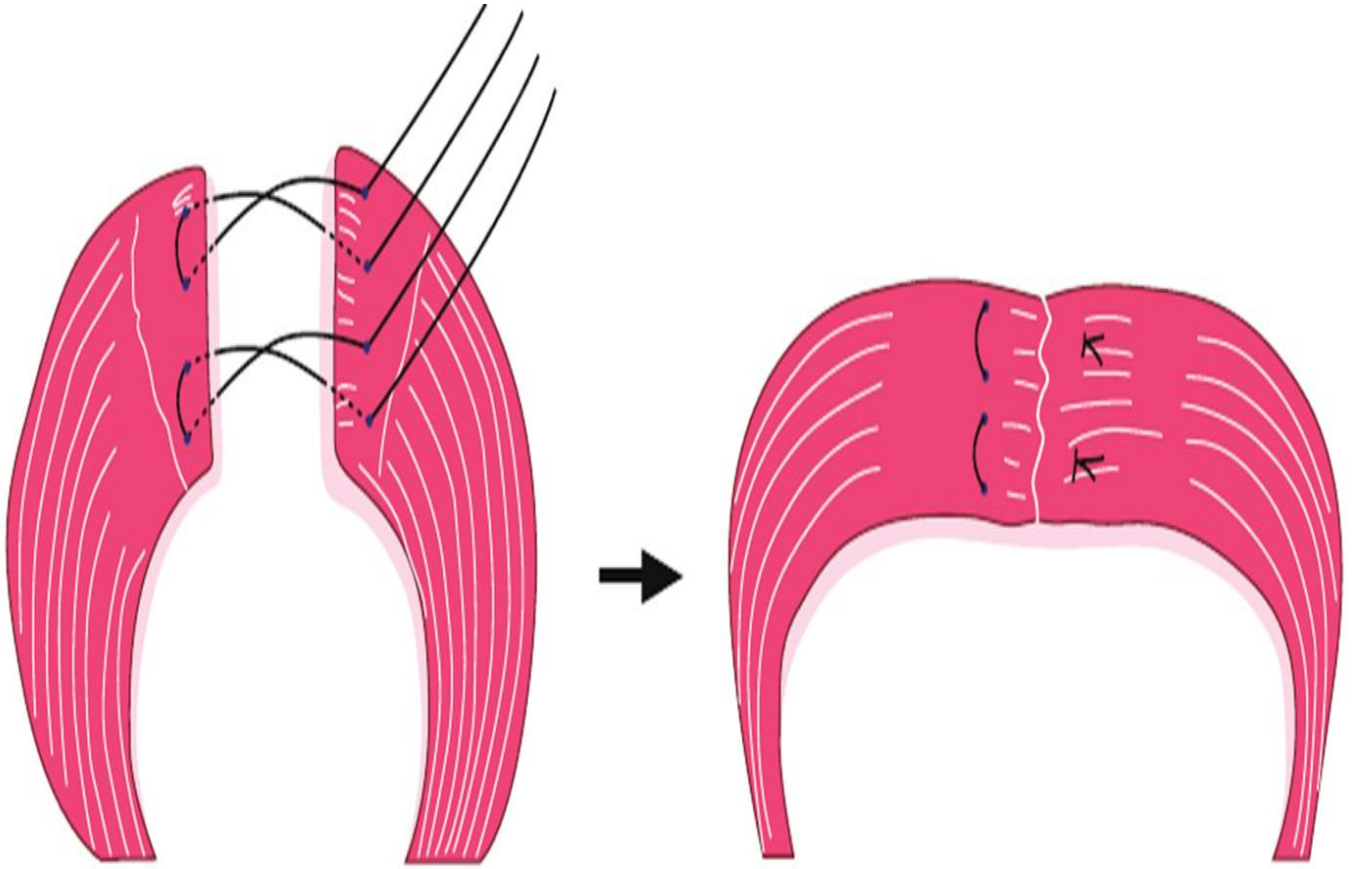
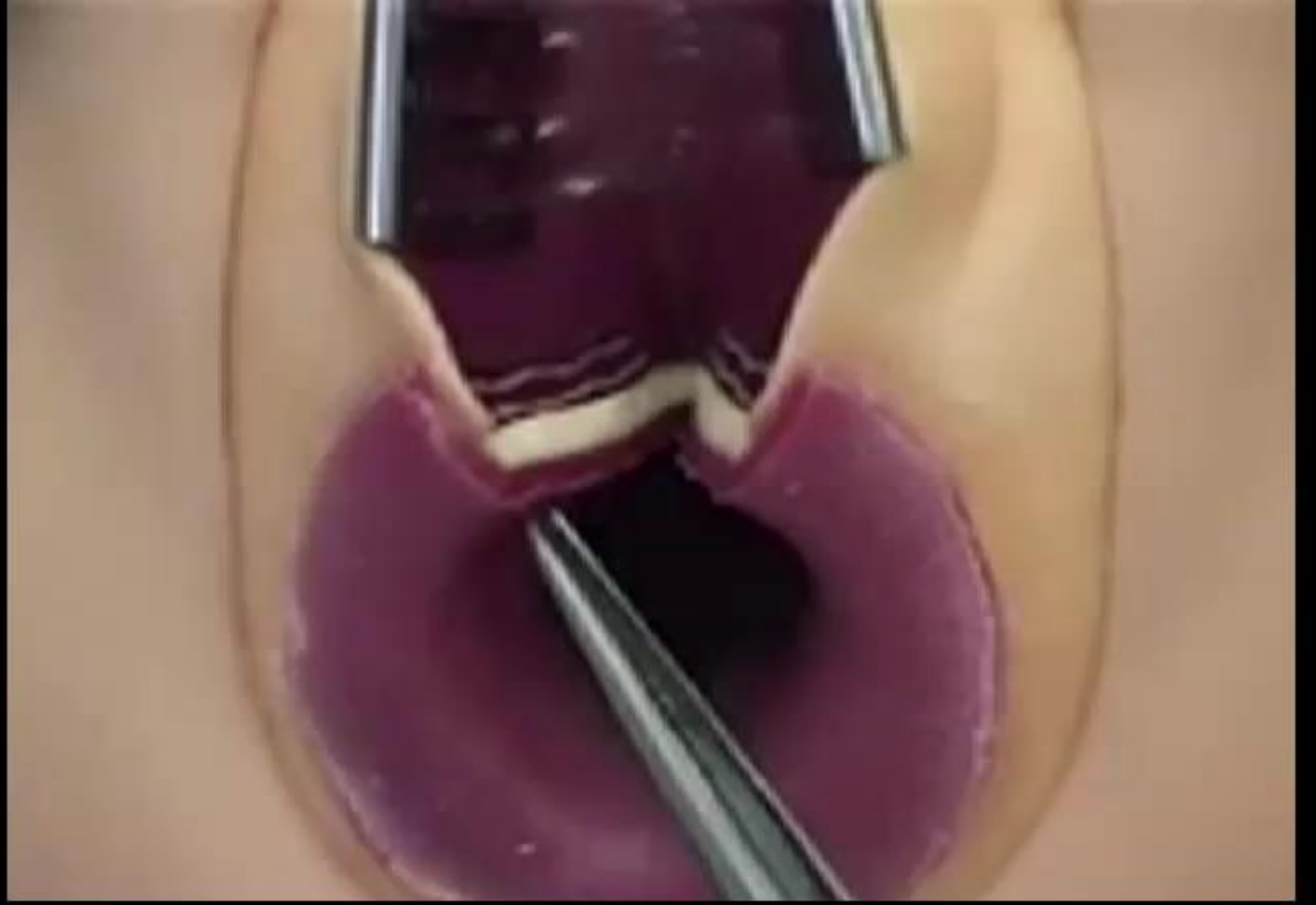


FIGURE 4.1. Diagrammatic representation of an end-to-end repair using "figure-of-eight" sutures.



Antibiotics : up to date

For first and second degree lacerations are unnecessary

For a third or fourth degree laceration:

- Single dose of a broad spectrum antibiotic:

(second generation cephalosporin cefotetan

or cefoxitin; clindamycin if beta lactam allergy) (Grade 2C)

- Sultan: oral antibiotic for 5-7 days
- Marked reduction in wound complications
- Contaminated by gross fecal spillage: local cleansing and irrigation

How should women with obstetric anal sphincter injury be managed postoperatively?

Postoperative laxatives to reduce the risk of wound dehiscence. (Level C) **NICE** , **ACOG**

Bulking agents should not be given (Level B) **NICE**

-Monitoring for urinary retention (or 24h Catheter fixation)

Pain control:

-Icepacks

-rectal suppositories (risk of poor wound healing and disruption of the repair)

-NSAID (constipating adverse effects)

-opiate (constipating adverse effects)

-Local lidocain (not recommended)

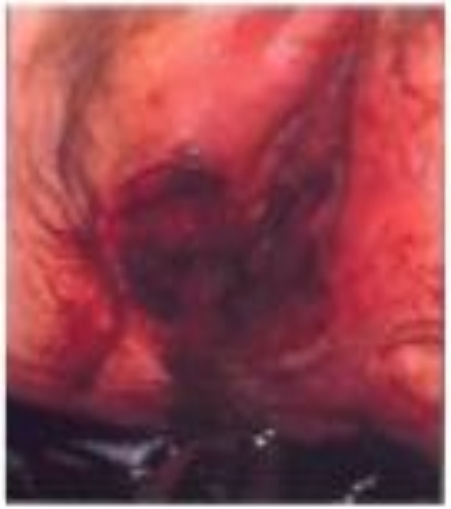
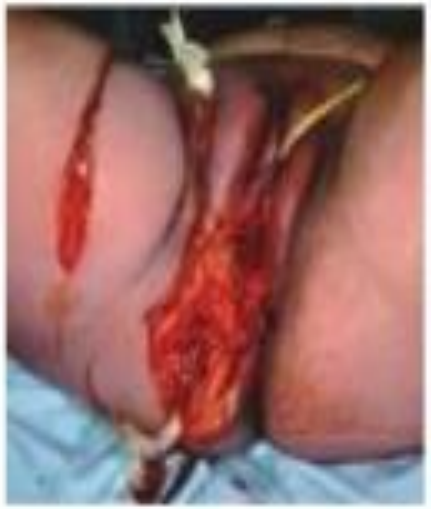
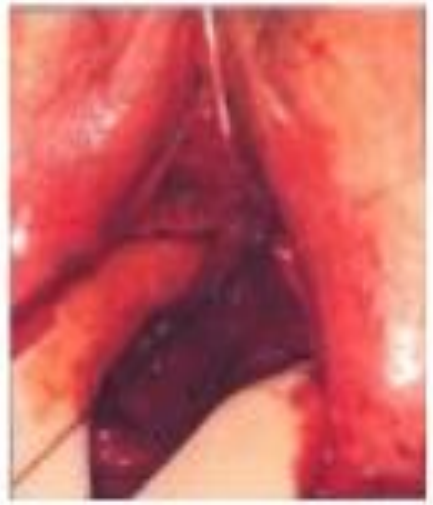
-expert opinion: early and consistent follow-up reduce the rate of hospital readmissions. **ACOG**

-physiotherapy following repair of OASIS could be beneficial. (✓) **NICE ACOG**

-No post-OASIS strategies are proved to prevent the development of anal incontinence. **ACOG**

-endoanal ultrasonography and anal manometry can aid decision making regarding future delivery

Complications

-Hematoma

-Infection (resolve with perineal wound care)

-Abscess (spontaneous breakdown or the need for intentional disruption to evacuate the abscess.)

-Necrotizing fasciitis

Retained sponges

Uncommon

Preventable (difficult to identify after they are soaked in blood)

6 weeks after OASIS:

25% wound breakdown

20% wound infection.

More pain than women with normal healing.

-Superficial breakdowns (not involve the rectum or anal sphincter): expectant management with perineal care (may spontaneous healing)

-Extensive breakdowns, or follow-up visits is difficult：primary closure

-Early closure of laceration dehiscence in properly selected cases may be appropriate (first 2 weeks versus 2-3m later)

Disadvantages:

- Harmful for mother-baby relationship
- Spontaneous repair
- Fair of repair

6-8 days wound care prior repair(debridement , irrigation , sitz bath , antibiotic if cellulitis)

Pre operation:

- Antibiotic
- Enema (mechanical prep is unnecessary)

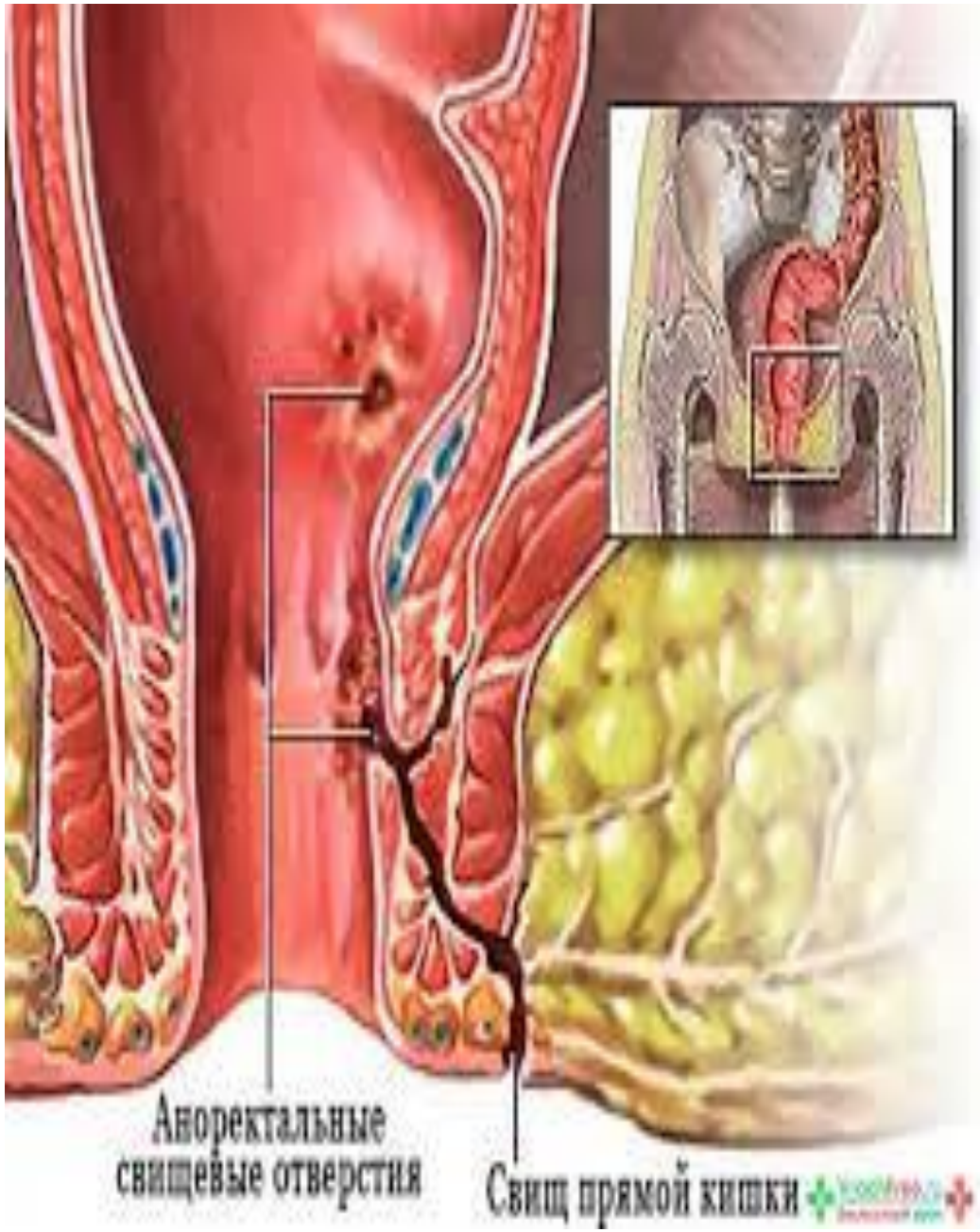
- Interrupted suture

inadequately repaired lacerations may lead to rectovaginal fistula:

-Repair depende on size and location

-Repair by someone familiar with fistula repair techniques

-Only when all signs of infection have resolved.



Anal incontinence

Conservative management:

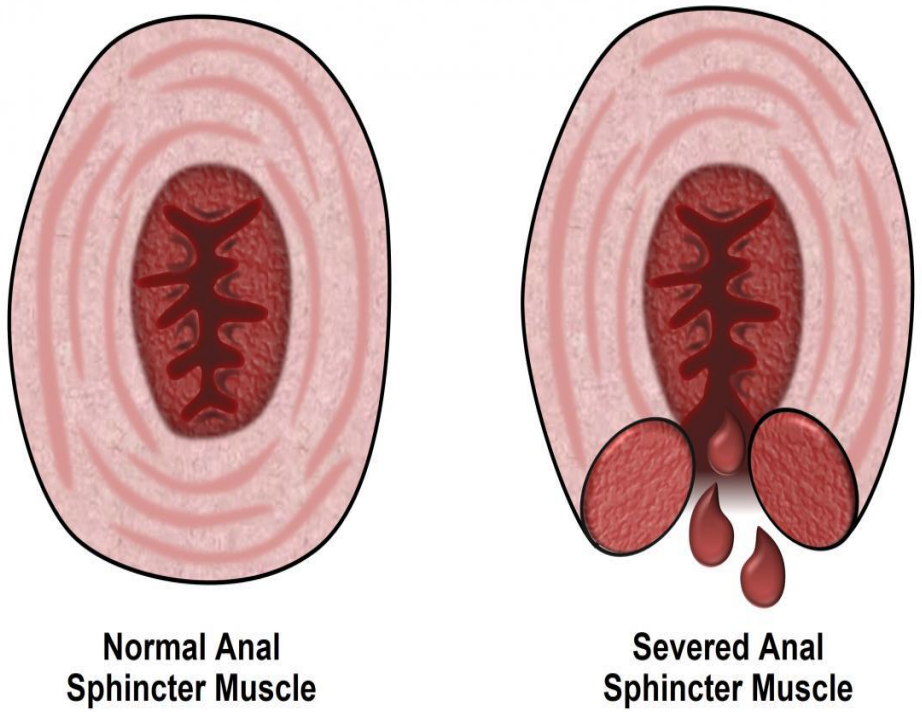
Diet (low residue)

Biofeedback

Physiotherapy

Lupiramid

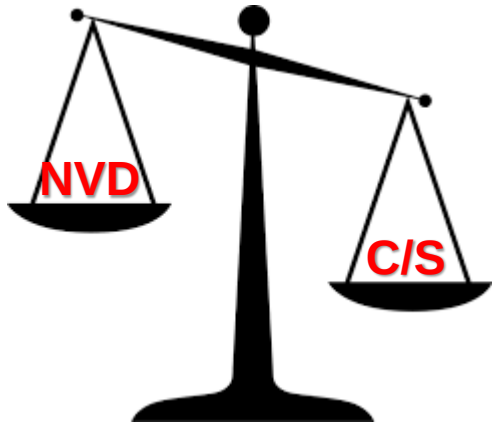
Surgery



What is the prognosis following surgical repair?

60–80% of women are asymptomatic 12 months following delivery

What advice should women be given concerning future pregnancies and mode of delivery?



option of elective caesarean birth: **(✓) NICE**

Sustained OASIS

Symptomatic

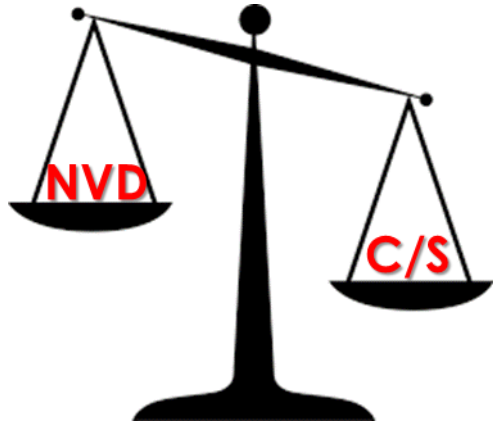
Abnormal endoanal ultrasonography or manometry

prophylactic episiotomy in subsequent pregnancies: Should only be performed if clinically indicated. **(B) NICE**

Women who have a *history of OASIS* should be counseled that the absolute risk of a recurrent OASIS is low with a subsequent vaginal delivery

-patient request after advising (C) **ACOG**

ACOG



Expert opinion : history of OASIS

Cesarean delivery offered if :

- Experienced anal incontinence
- Complications including wound infection
- Repeat laceration repair
- Suffering psychological trauma and requests cesarean delivery

Rise in litigation related to OASIS:

Majority related to failure to identify the injury (subsequent anal incontinence, rectovaginal and anovaginal Fistulae)

Occurrence of OASIS is not considered substandard care.

Failure to recognize or an adequate repair are substandard care.

A poor technique

Poor selection of materials

Poor healing

Documentation: anatomical structures involved, method of repair, suture materials (✓) **NICE**

Fully informed the women (nature of tear ,follow-up, information) (✓) **NICE**

DETAILS OF PERINEAL TRAUMA REPAIR ___ Mayday University Hospital

Patient Name: ..... Number: ..... Date:.....

Tick type of perineal trauma **First degree ☐ Second degree ☐**

Third degree ☐, *if third degree please specify* 3a / 3b /3c Fourth degree ☐
Episiotomy ☐ If yes, Please state indication.....

Extent of trauma **tick ALL relevant boxes) Unilateral vaginal tear ☐ Bilateral vaginal tear ☐**

Labial trauma ☐ Perineal skin edges down to anal margin

Anaesthetic for repair **None ☐ Epidural ☐ Spinal ☐ Lignocaine ☐_____ mls**

Repair details
Time of delivery .....Time repair commenced .....Time repair finished .....

Method of repair

Vagina	**Interrupted / Continuous**	**Suture used Vicryl / Vicryl Rapide**
Perineal muscles	**Interrupted / Continuous**	**Suture used Vicryl / Vicryl Rapide**
Perineal skin	**Interrupted / Continuous**	**Suture used Vicryl / Vicryl Rapide**
Anal mucosa	**Interrupted / Continuous**	**Suture used Vicryl / Vicryl Rapide**
Internal anal sphincter	**Interrupted / Mattress**	**Suture used PDS / Vicryl**
External anal sphincter	**Overlap / End to end**	**Suture used PDS / Vicryl**

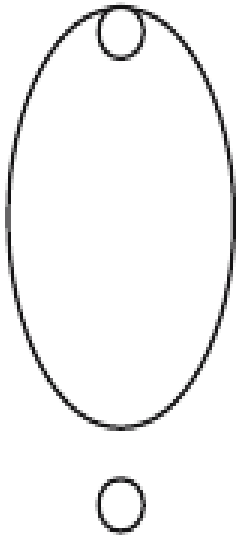
Additional information
.....

Please complete diagram, mark lacerations and suture repair

Urethra →→→

Vagina →→

Anal sphincter →→→



Rectal examination done before repair **Yes / No** Rectal examination done after repair **Yes / No**

Vaginal examination done **Yes / No** Tampon Removed **Yes /No**

Needle count correct **Yes / No** Swab count correct **Yes/No**

Estimated blood loss **After delivery …….. mls** **After suturing …… mls** **Total …….. mls**

Repaired by

(Print Name) …….. **Midwife / Doctor**

***If* midwife: grade ……..** ***If* doctor: Consultant / Staff Grade / SpR / SHO**

- 1- کدام مورد برای کاهش OASIS توصیه شده است؟

الف: ماساژ پرینه

ب: کمپرس گرم

ج: مانور دادن برای خروج سر

د: اپی مدیولترال

- 2- بهترین روش توصیه شده برای تشخیص آسیب اسفنگتر هنگام زایمان کدام است؟

الف: سونو اندوآنال بر بالین بیمار

ب: معاینه رکتو واژینال

- 3- بهترین روش برای ترمیم ***اسفنکتر داخلی*** کدام است؟

الف: Overlap

ب: End-to-End

ج: فرقی ندارد

- 4- بهترین روش برای ترمیم ***اسفنکتر خارجی*** کدام است؟

الف: Overlap

ب: End-to-End

ج: فرقی ندارد