

Uterine Rupture

&

Recent Perineal Tears

BY

PROF. DR. YASSER A. HELMY

Prof. of OBST/GYN

Uterine rupture:

Uterine rupture is a Separation of the muscular wall of the uterus.

It is a catastrophic event that occurs in approximately 1 in 1000 to 1 in 6000 deliveries. It carries a high maternal & fetal mortality.

Uterine rupture usually occurs during labor but occasionally happens during the later weeks of pregnancy

Uterine rupture: Causes:

During pregnancy:

**** Spontaneous rupture of uterine scar as a result of:

--CS: UPCS much more common than LSCS

--Myomectomy

--Metroplasty

--Previous repair of uterine rupture

--Old curettage perforation

Uterine rupture: Causes:

During pregnancy:

****Traumatic uterine rupture:

--Perforation due to instrumental induction of abortion

--External version

****Congenital:

--Pregnancy in an undeveloped rudimentary horn 4

Uterine rupture: Causes:

During labor:

--Uterine hyperstimulation (oxytocin or prostaglandins)

--Obstructed labor (macrosomia, fetopelvic disproportion)

--Intrauterine manipulation (internal version, manual removal of an adherent placenta, breech extraction, difficult forceps operation, vigorous fundal pressure during labor)

--Rupture of a uterine scar

Uterine rupture: Predisposing conditions:

--High parity

--Pendulous abdomen (maldirection of the uterine force)

--Overdistension of the uterus (polyhydramnious, multifetal pregnancy)

--Insertion of the placenta on a uterine scar₅

Uterine rupture: Types:

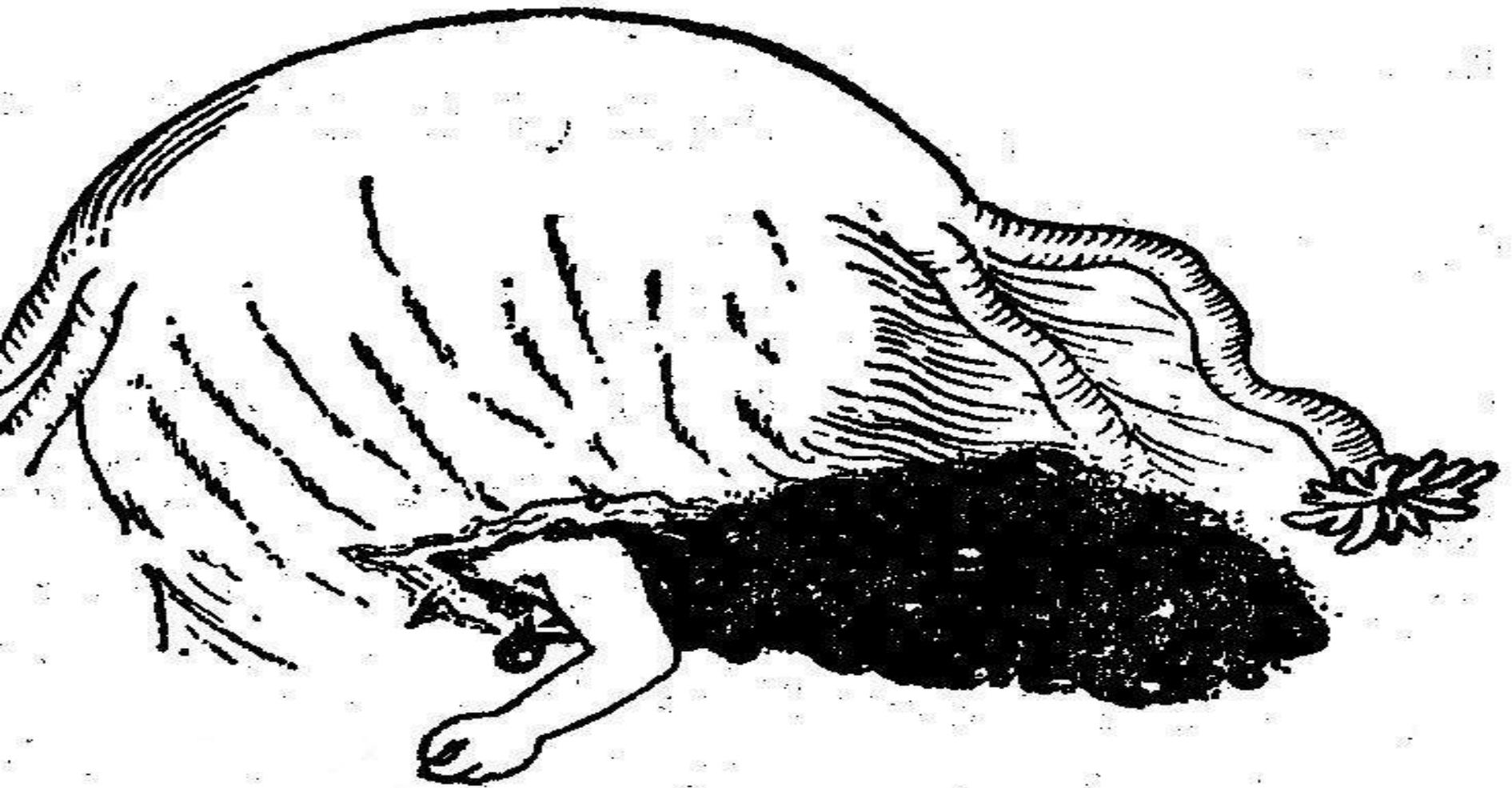
Depending on whether the peritoneal coat is torn or not uterine rupture is classified into:

--Complete rupture (Communicating the uterine and peritonea cavities)

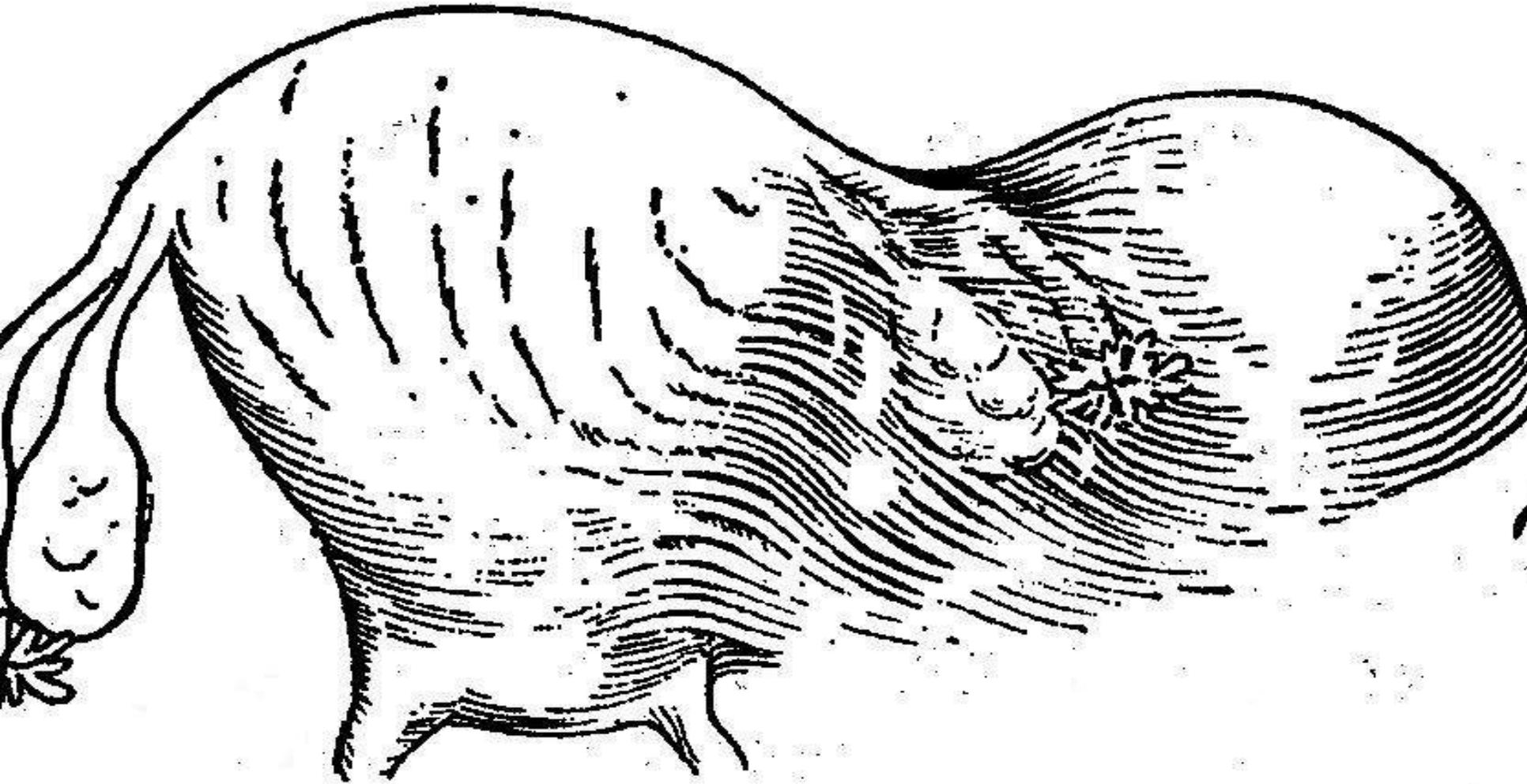
or

--Incomplete rupture (the peritoneal covering is not ruptured Or the rupture opened in one of the broad ligaments)

Uterine rupture: Types:



Uterine rupture: Types:



Uterine rupture: Clinical picture:

Rupture during pregnancy:

The symptoms vary greatly depending on the rate of tearing of the uterine wall. There may be:

--Pain: varies from lower abdominal discomfort to severe pain

--Vaginal bleeding: may be mild or even absent

Uterine rupture: Clinical picture:

Rupture during pregnancy (continued):

- The fetus is easily felt under the abdominal wall
- The empty uterus is felt separately on one side of the lower abdominal wall
- There may be signs of internal hemorrhage
- The patient may develop shock and collapse

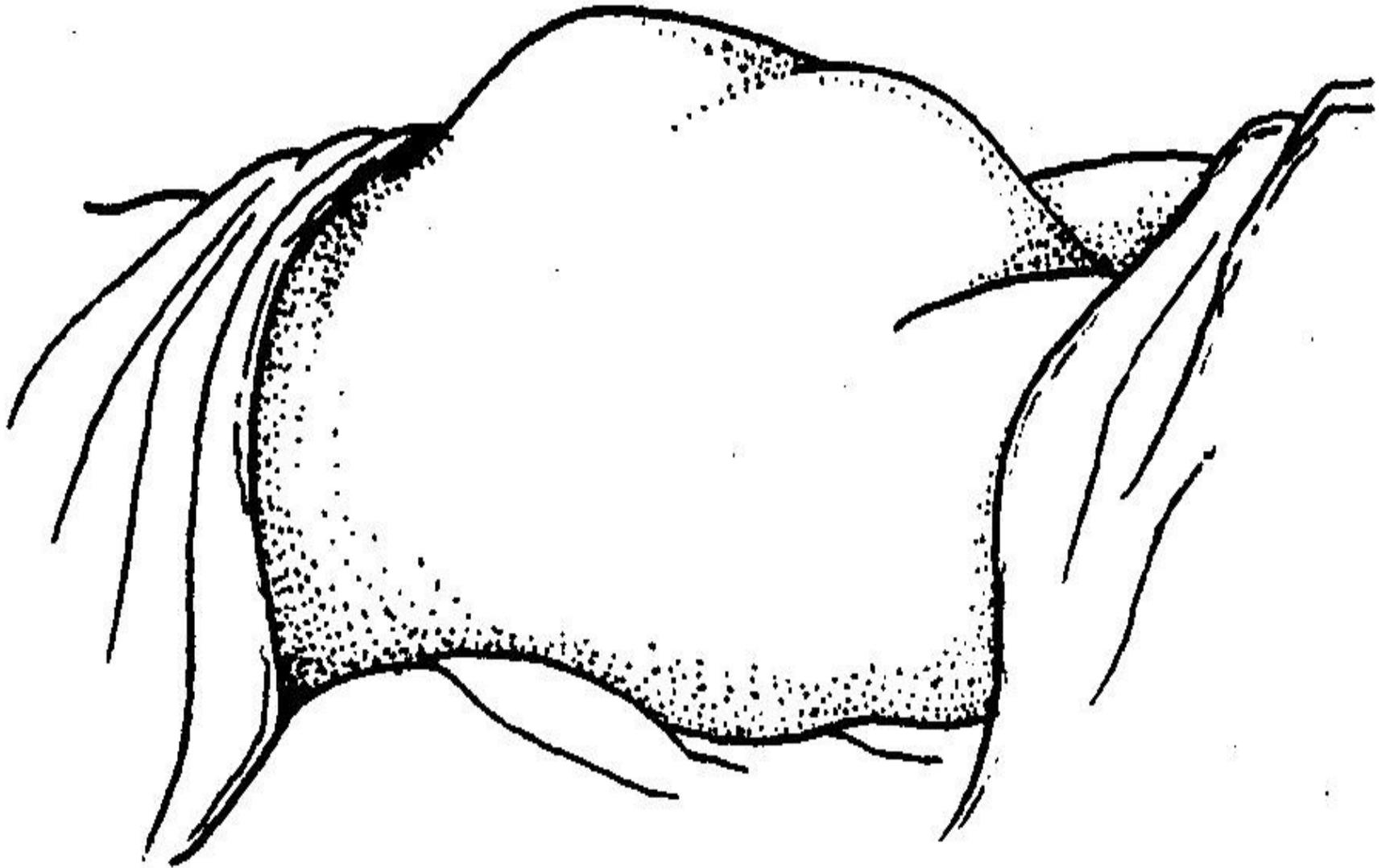
Uterine rupture: Clinical picture:

Rupture during labor:

Uterine rupture during labor is preceded by a picture of impending rupture of the uterus (obstructed labor):

labor is prolonged with maternal exhaustion: dry mouth, rapid full pulse, acidotic breath, raised temperature, tetanically contracted uterus, pathological retraction ring, the vagina is dry edematous and the cervix is hanging down

Uterine rupture: Clinical picture:



Uterine rupture: Clinical picture:

Rupture during labor (continued):

When actual rupture occurs there may be:

- sudden severe pain
- vaginal bleeding (may be minimal)
- collapse and signs of internal hemorrhage
- cessation of uterine contractions
- fetal death
- abnormal lie & the fetal parts are easily felt
- the presenting part recedes away from the pelvic brim

Uterine rupture: Treatment:

**** Antishock measures

**** Laparotomy: Hysterectomy or repair is performed according to the need of the uterus and extent and reparability of the uterine rupture

Recent Perineal Tears

Recent Perineal Tears: Predisposing Factors:

- Rigid Perineum: e.g. elderly primigravidae, scarred perineum
- Narrow subpubic angle
- Large size of fetal head or shoulders
- Malpresentation & malposition
- Instrumental delivery
- Friable perineum due to infection or edema

Recent Perineal Tears: Degrees:

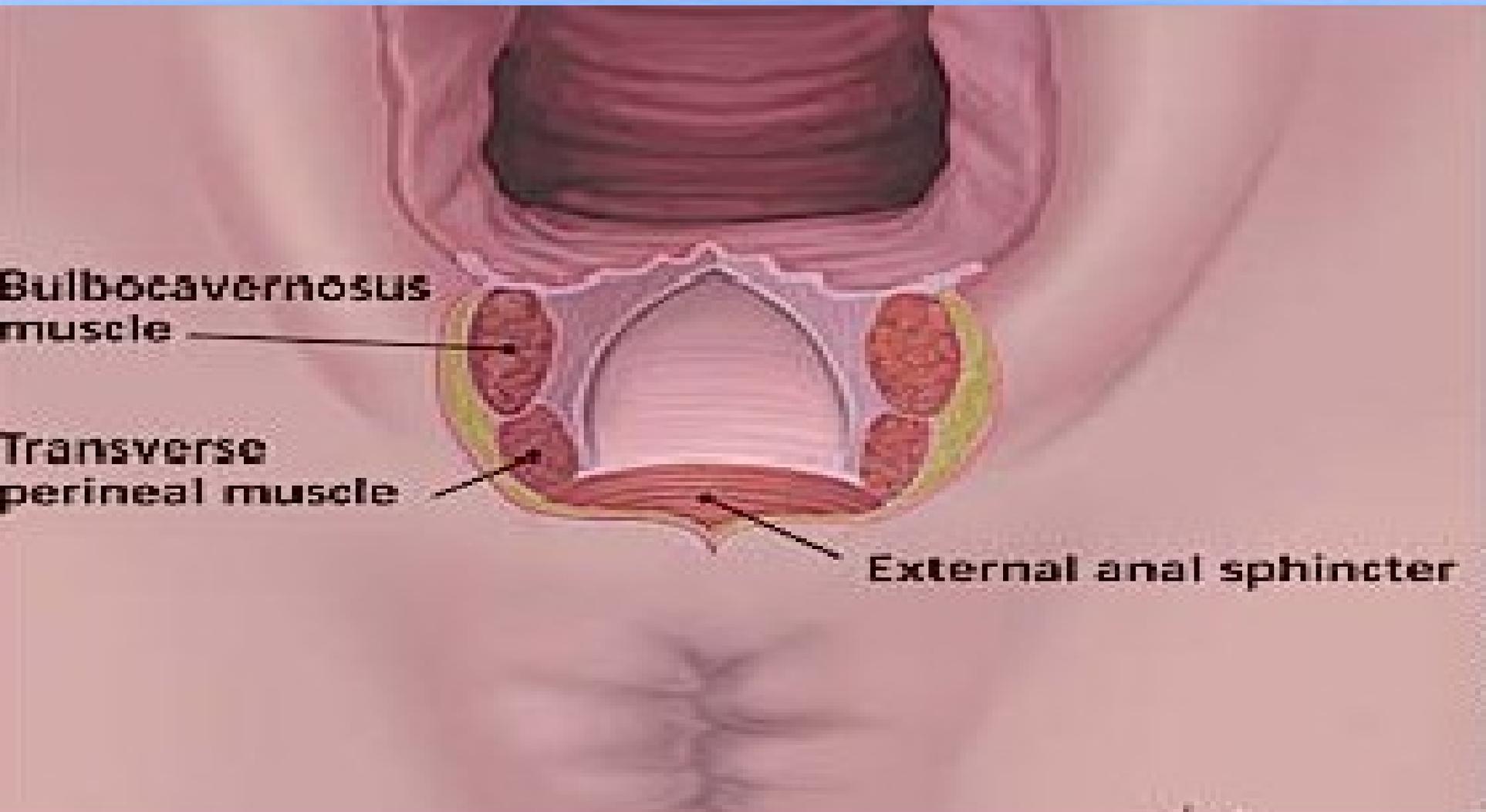
--1st degree: involves the skin of the anterior edge of the perineum

--2nd degree: involves the perineal skin & the muscles of the perineal body but not the superficial anal sphincter

--3rd degree: involves the posterior vaginal wall, muscles of the perineal body & superficial anal sphincter but the anterior wall of the anal canal remains intact

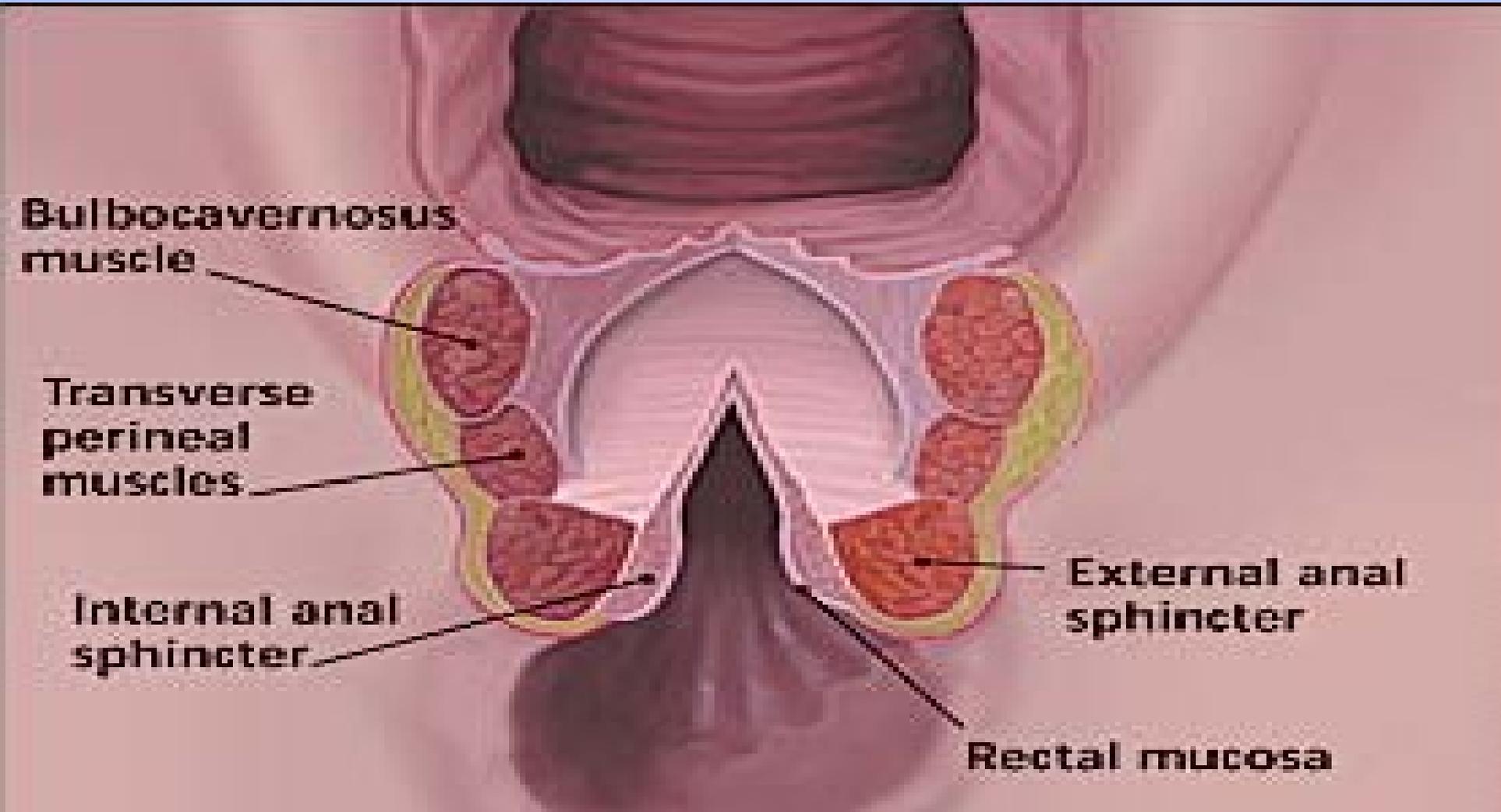
--4th degree: as the 3rd degree but here the anterior wall of the anal canal is also torn

Recent Perineal Tears: Degrees:



Second degree perineal tear

Recent Perineal Tears: Degrees:



Fourth degree perineal tear

Recent Perineal Tears: Repair:

- Perineal tears should be repaired immediately
- If delayed (24h) the tissues become devitalized and infected with high failure rate, so repair is delayed for 6-8 weeks
- The repair is done under anesthesia and includes anatomical reconstruction of the torn tissues.

Thank
you