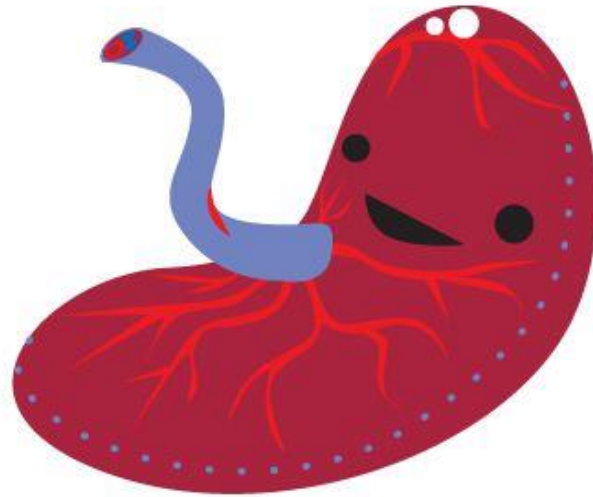


Abnormal Placentation

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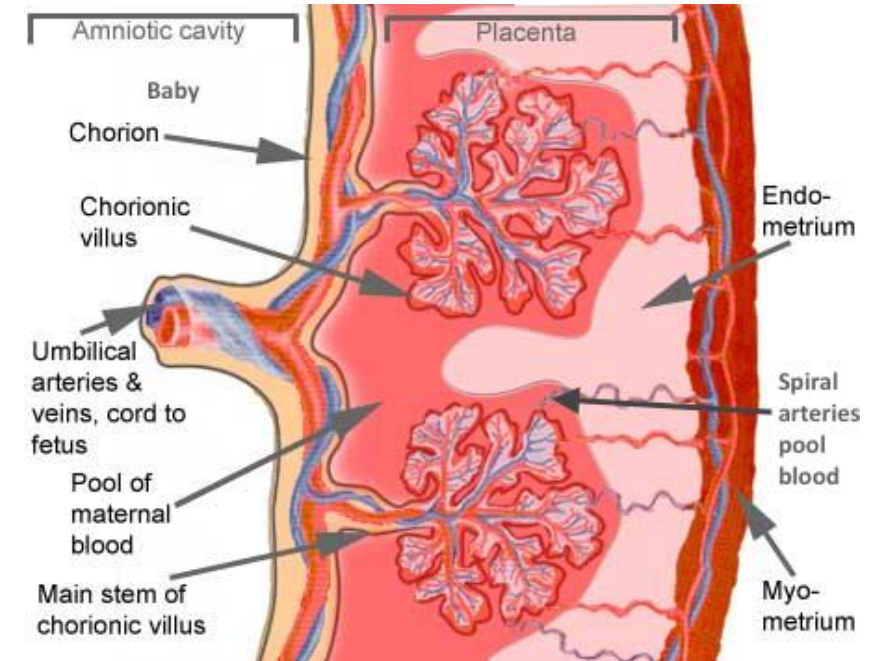
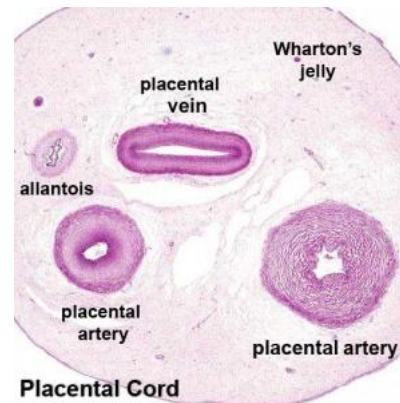
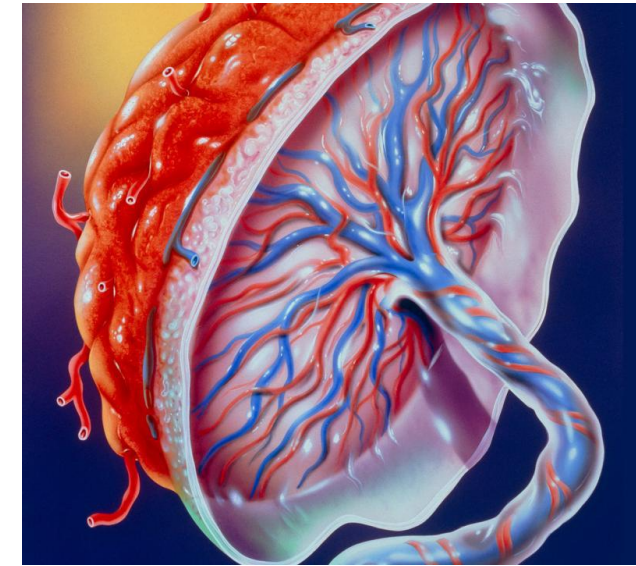
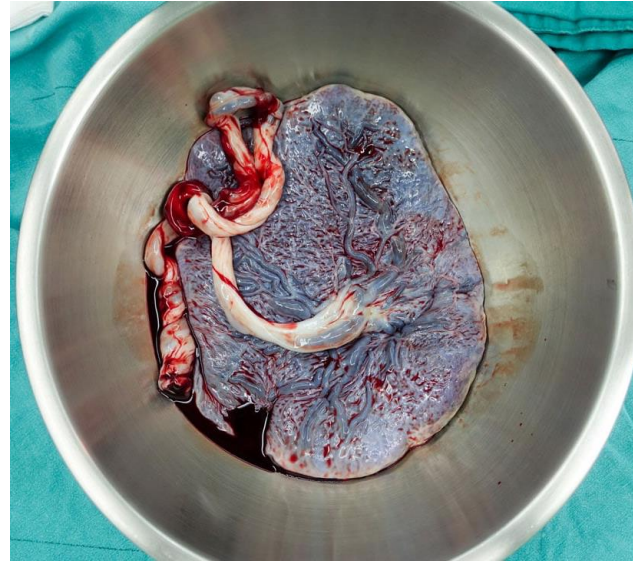


Outline

- Placental basics
- Placenta previa
- Placenta accreta
- Placental abruption
- Cord abnormalities
- How to deliver a placenta

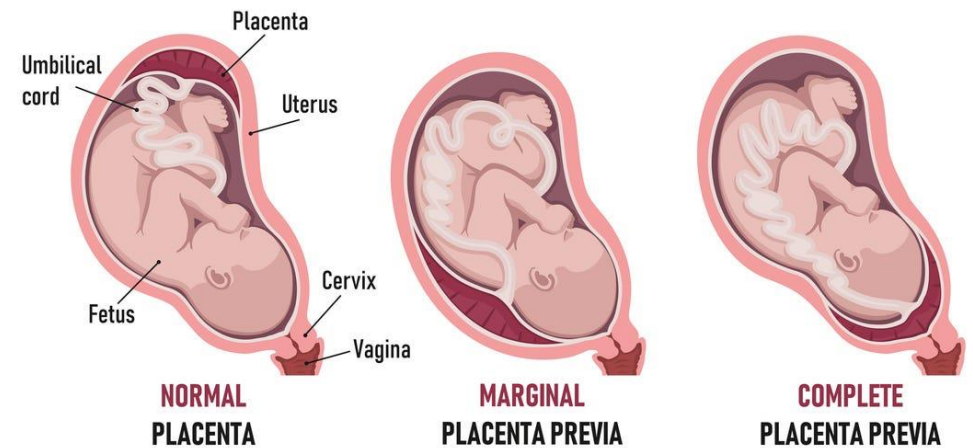
Placental Basics

- Umbilical arteries = blood away from baby
 - Deoxygenated (opposite of adults)
 - 2 arteries
- Umbilical vein = blood towards baby
 - Oxygenated (opposite of adults)
 - 1 vein
- “3VC” = 3 vessel cord
- Maternal blood has a higher affinity for CO₂ in order to “pull” CO₂ from baby



Placenta Previa

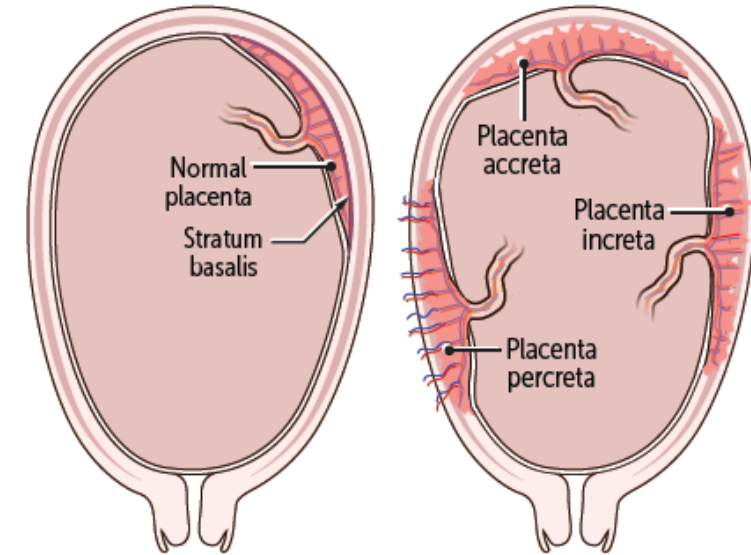
- Definition
 - Placenta covering the internal os (may be partial/ marginal or complete)
- Risk factors
 - Prior cesarean
 - Uterine curettage
 - AMA
 - Multiparity
- Management
 - Inpatient management after 3rd bleed
 - Cesarean section @ 36 weeks
 - Avoid anything in the vagina (no intercourse)
- Classic case
 - 29y/o G3P2002 at 28w3d by LMP, no prenatal care, history of 2 prior cesarean sections, presents to triage w/ painless vaginal bleeding.



*always US first!
*no digital exams

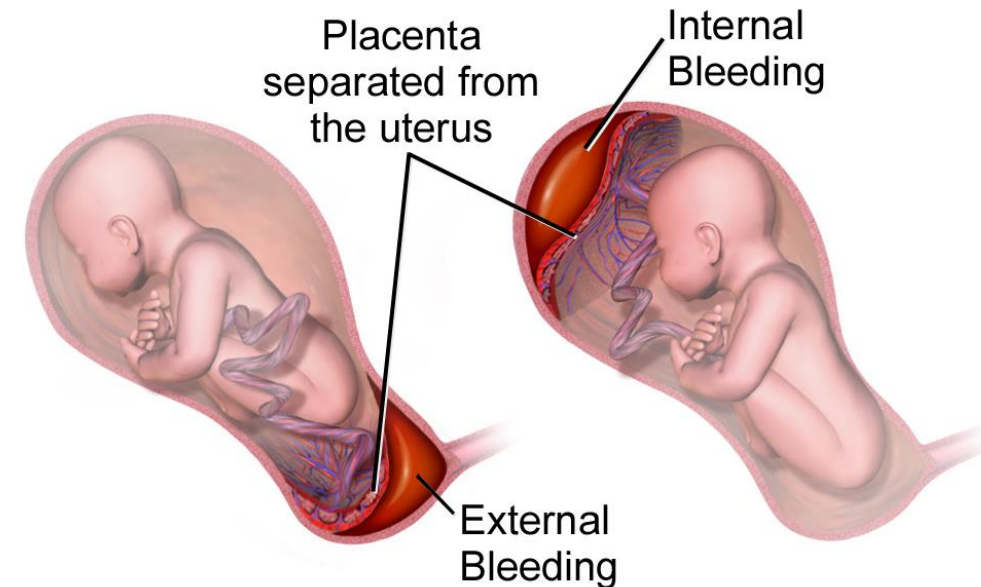
Placenta Accreta

- Definition
 - Placenta invades beyond normal boundary and is abnormally adhered to uterus
 - Increta: invades myometrium
 - Percreta: invades serosa (can invade bladder)
 - US findings: *lacunar lakes*, decreased interface between placenta and uterus, increased vascularity
- Risk factors
 - Prior cesarean
 - Uterine curettage
- Management
 - Cesarean hysterectomy (AKA “C-hyst”) @ 34 weeks
- Classic case
 - 29y/o G3P2002 at 38w2d presenting w/ no PNC, h/o 2 prior cesarean sections, presenting w/ painful contractions, vagina bleeding, SVE 4/50/-2, undergoes repeat cesarean delivery, intraop, placental extraction is difficult and brisk bleeding noted.

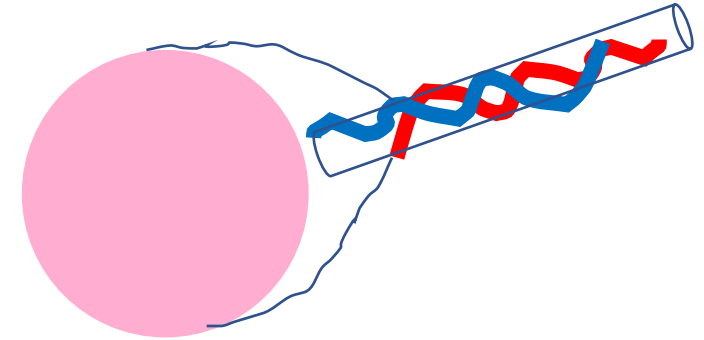
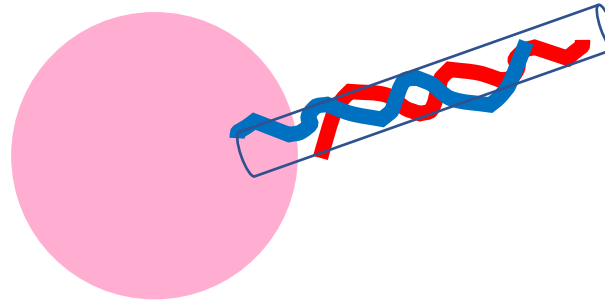
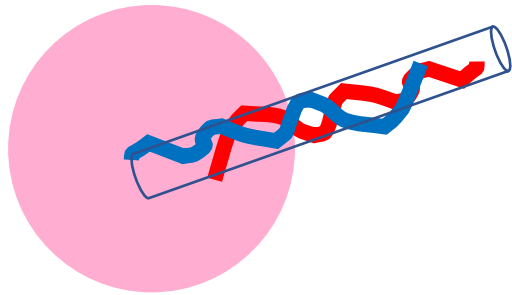


Placental Abruption

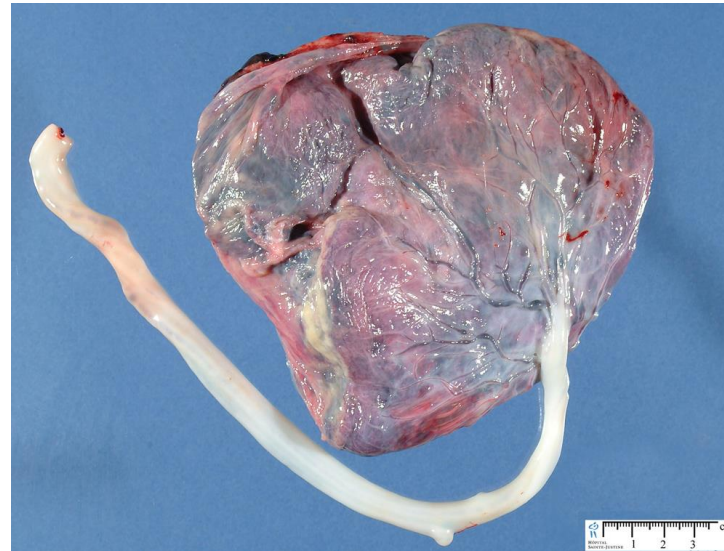
- Definition
 - Separation of placenta from uterine wall
 - Clinical dx – can be asymptomatic, vaginal bleeding, abdominal pain, FHT decels, +uterine ctx
 - May be concealed
- Risk factors
 - Trauma, h/o prior abruption, HTN/ preeclampsia, smoking, PPROM, cocaine use, AMA
- Management
 - CBC, PT/PTT, fibrinogen, T&S
 - KB test (Kleihauer-Betke) – assess for fetal RBCs in maternal circulation
 - Not contraindication to vaginal delivery if mother is HDS
- Classic case
 - 29y/o G3P2002 at 38w2d w/ h/o cocaine use presenting w/ abdominal pain, brisk vaginal bleeding. FHT in 60s, minimal variability → C/S
 - 29yo G3P2002 at 38w2d presenting after MVC @ 60 mph where she was restrained passenger. No bleeding, no pain, good fetal movement. Toco demonstrates *high frequency low amplitude* contractions, FHT Cat 1.



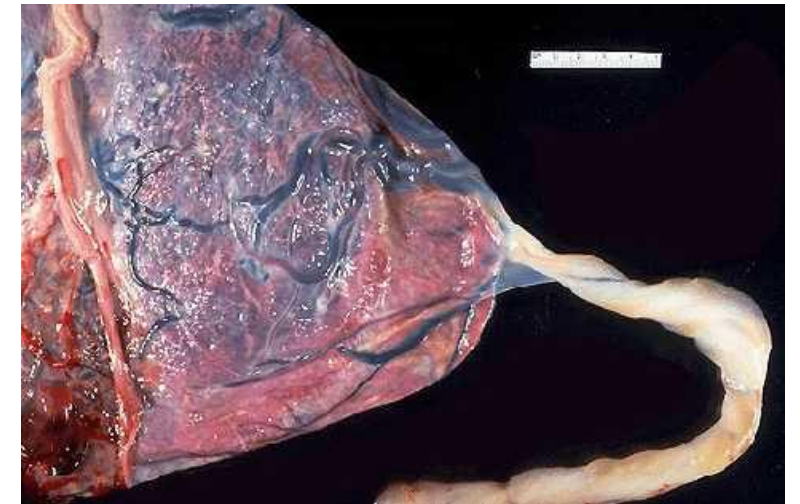
Cord abnormalities



Normal



Marginal Cord insertion



Velamentous Cord insertion

How to deliver a placenta (steps)

1. Clamp placed on cord (near baby), instrument placed on cord. Support person cuts in between to separate baby

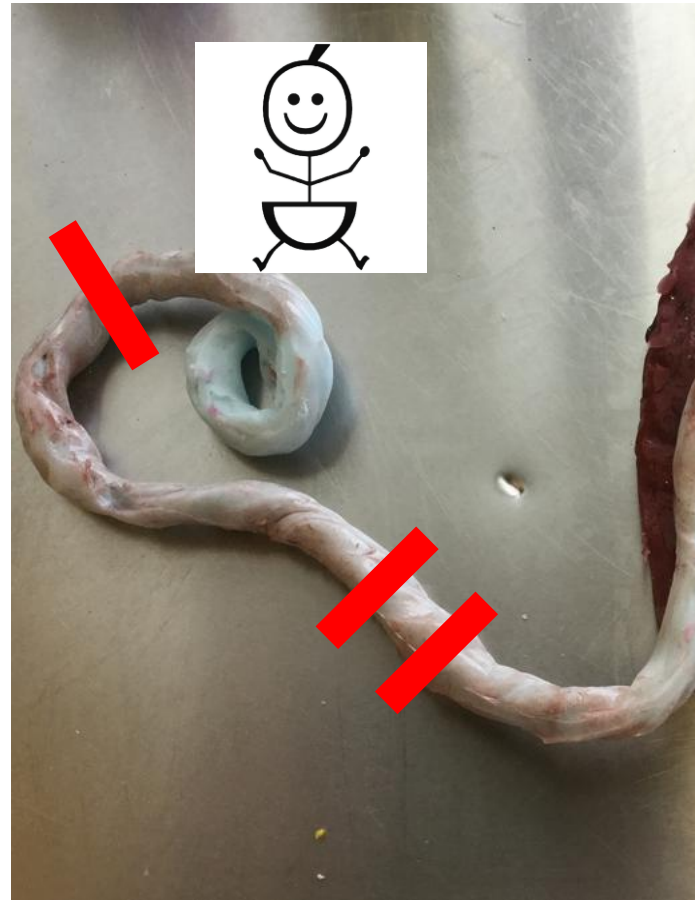


Baby

-“It’s going to be a little juicy”
-“It’s normal for there to be some blood, don’t worry, you’re not hurting the baby.”

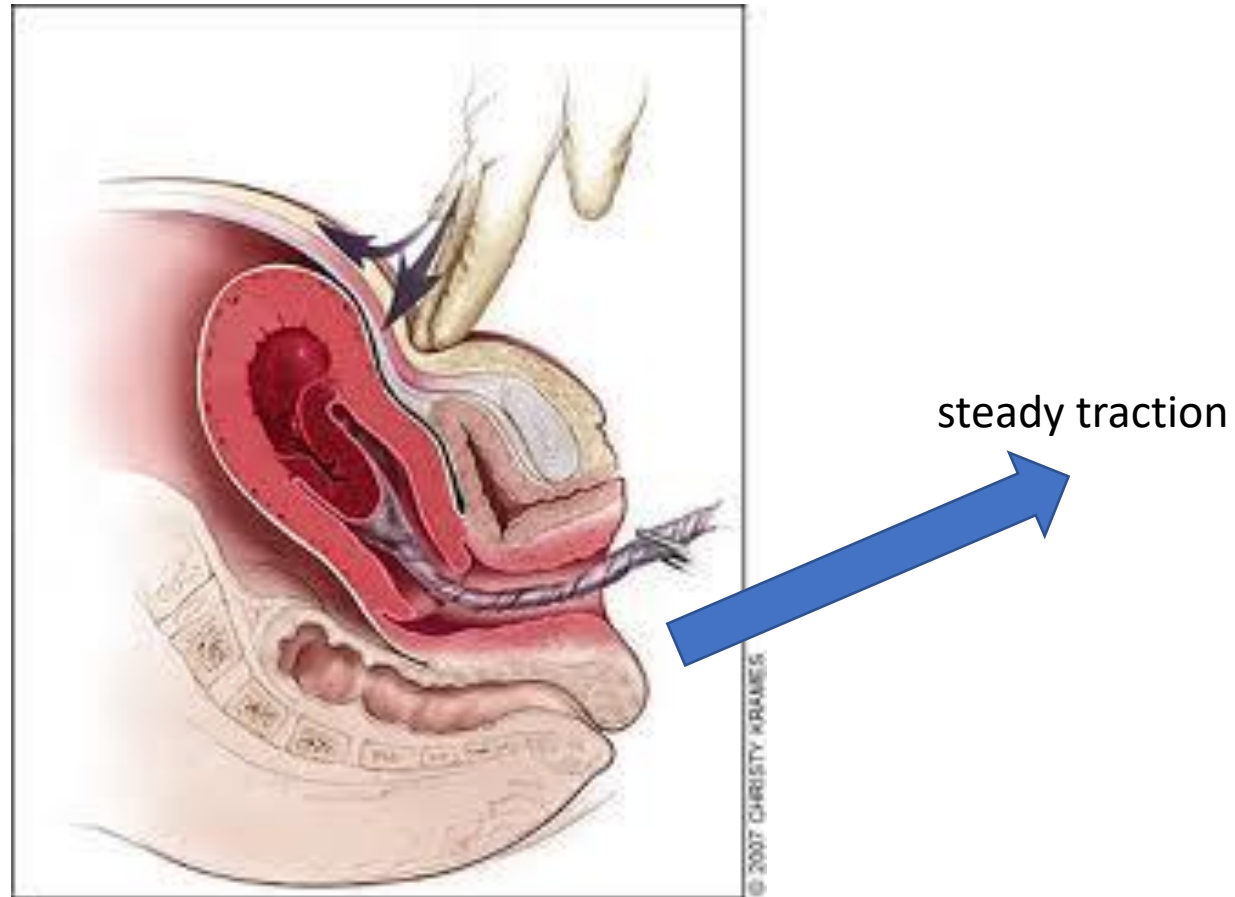
How to deliver a placenta (steps)

2. Obtain segment of cord for cord blood gases



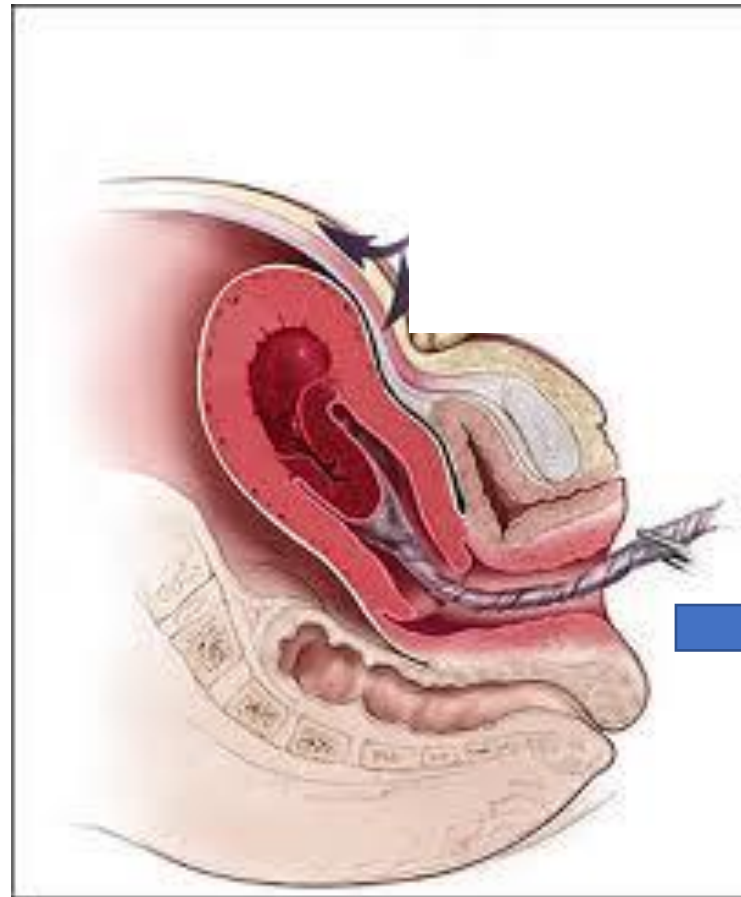
How to deliver a placenta (steps)

3. Gentle traction on cord, applying suprapubic pressure



How to deliver a placenta (steps)

4. Once placenta is at level of introitus, can remove non dominant hand from suprapubic region to help guide placenta out.

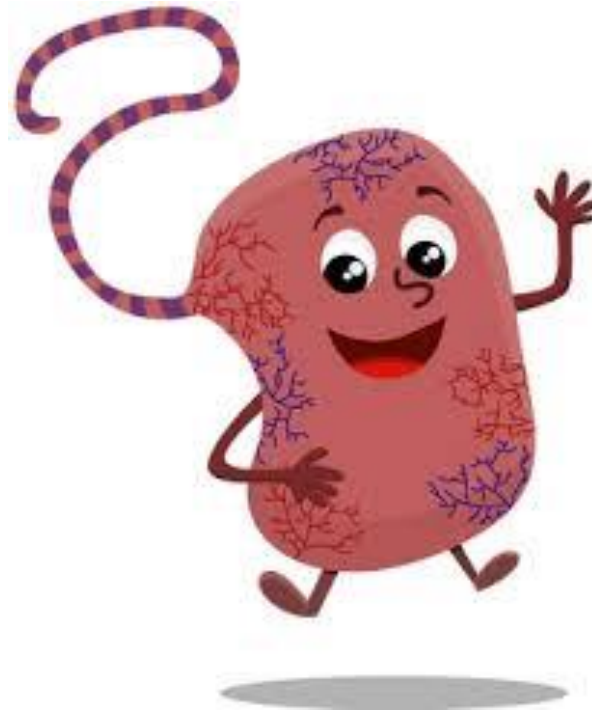


change direction of traction

Common questions during placental delivery

- How long do we have for the placenta to deliver?
 - 30 minutes
- Placenta isn't coming... what are you worried about?
 - Accreta
- What are signs of placenta separation?
 - Uterus contracts
 - Gush of blood
 - Cord lengthening
- What is the point of suprapubic pressure?
 - Prevent uterine inversion

Questions?



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