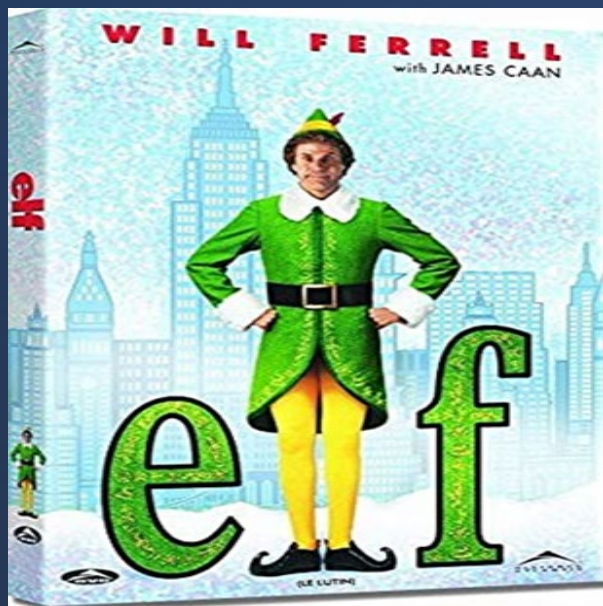


Assessment of the OB Patient Presenting to the ED- Delivery and Management 3rd and 4th Stage of Labor

Jill Henkle RNC-OB

Kristal Graves DNP. MSN-ED RN





Support acknowledgement: HRSA State Maternal Health Innovation Program

This presentation was supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS). The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government.



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- I have no financial disclosure to make
- Speakers have no financial disclosures to make
- Any specific products mentioned, no compensation for any products or social media platforms mentioned

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In Chat put in name and facility



Must attend live Zoom Meeting

Simulation Updates



Working on a virtual simulation format
Will be doing in 2022



Our Team is excited to develop this type of format



Developing agendas for in-person site visits – 4 will be in-person 2022



Simulation Workshop specifically for ED's

Future Presentations

- **January 24th, 2022 noon – 1pm** – Diversity, Ethnicity and Inclusion Offering – Bias
- **February 24th 2022 noon – 1:30 pm** – Guest Speaker – Dr Mary Grace Elson - History of Race in Obstetrics and Gynecology – DEI training
- **March 21st 2022 noon – 1:30 pm** – OB Emergencies Post Partum Hemorrhage
- We will be offering evening sessions – stay tuned for more information !



Vaginal Delivery in Rural Emergency Rooms

12/2021

Kristal Graves DNP, MSN-Ed, RN &
Jill Henkle RNC-OB



Support acknowledgement: HRSA State Maternal Health Innovation Program

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Objectives

- Participants will be able to describe preparation needed for a vaginal delivery in a rural emergency room
- Participant will be able to describe supplies needed for vaginal delivery
- Participants will be able to discuss proper technique to assist with a vaginal delivery

Be Prepared with Supplies

Precipitous Delivery Kit:

- Do you have one in your ER?

Supplies needed in kit:

1. Blankets or towels
2. Cord Clamps (at least 2)
-Or hemostats
3. Bulb Suction
4. Scissors
5. Sterile Gloves



Other items: Warm blankets, neonatal ambu bag

A Baby is Coming

Steps:

- **Remember the triage questions**
 - Gestation, how many babies, leaking of fluid (color/odor), risk factors
- **Preparation**
 - Position left lateral to assess the patient; Can delivery on back, side, hand and knees *(Recommend to deliver in bed, not standing)*
 - Get the precip delivery kit
 - Start IV (18 gauge)
 - Fluids/Blood
 - Extra help: Want 1 nurse for mom and 1 nurse for baby; extra provider?
 - Notify nearest OB hospital of imminent delivery and get transport arranged for post delivery

Delivery

Crowning:

- **Never hold pressure on head to try to delay/stop delivery:**
 - May support the perineum and gently ease the head out



Delivery

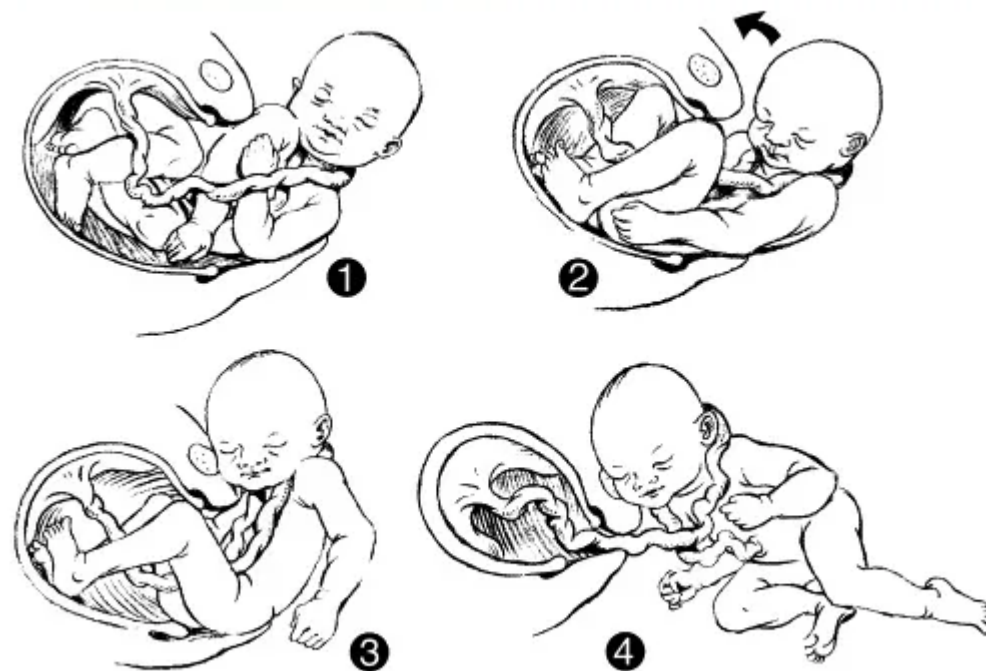
Delivery of head:

- Once head is delivered
 - Have patient stop pushing and feel for a nuchal cord
 - Try to reduce the nuchal cord
 - If unable to reduce the nuchal cord, keep head/neck close to perineum for delivery



Medscape®

www.medscape.com



Delivery

External Rotation of Head:

- Support the head as it rotates for shoulder presentation
**Have patient not push or only push slowly during this time to decrease risk of lacerations

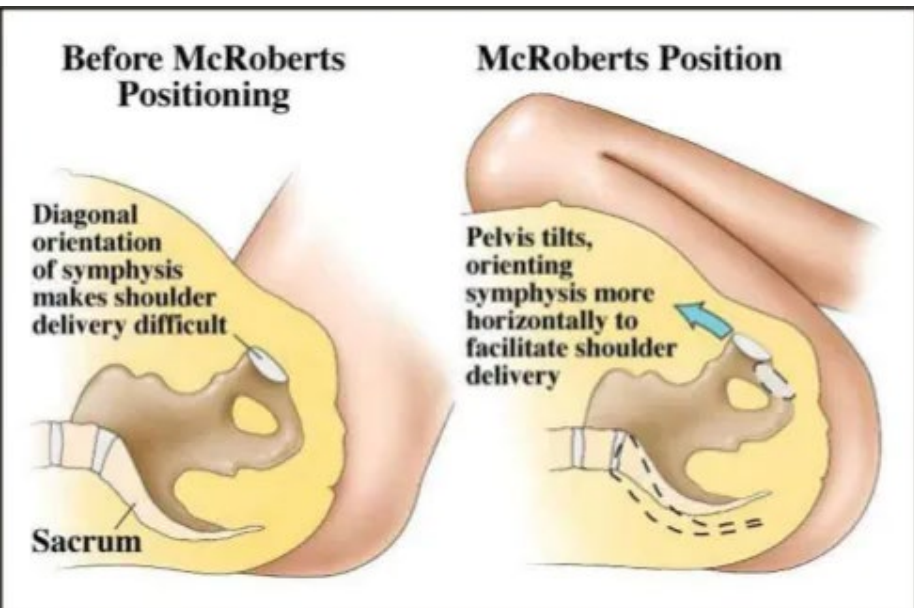


Delivery Complication

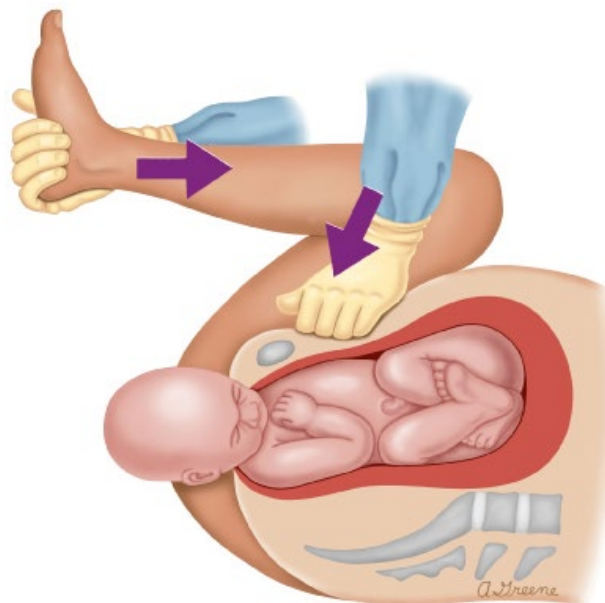
Shoulder Delivery

- Complication:
 - Shoulder Dystocia: one or both shoulders is stuck in the pelvis
 - Visual: Turtle sign
- What to do:
 - HELPERR**
 - H: Call for help
 - E: Evaluate if need episiotomy
 - L: Legs (McRoberts Maneuver) Pull knees to chest to rotate the pubic bone
 - P: Suprapubic Pressure
 - E: Enter Maneuvers (Rotate shoulders)
 - R: Remove Posterior arm
 - R: Roll patient (hands and knees)

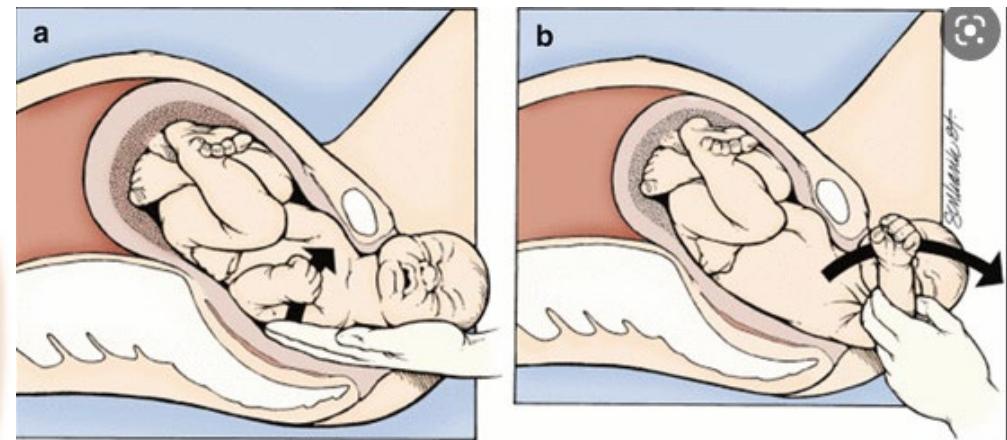
Delivery



McRoberts



McRoberts with Suprapubic Pressure



Removal of Posterior arm

Delivery

Shoulder Delivery:

- Guide head down gently to delivery anterior shoulder



Delivery

Shoulder Delivery:

- Guide head upward gently to deliver posterior shoulder



Delivery

Deliver on the bed:

- Keep foot of bed on
 - Can place baby right onto patient's abdomen or chest but do not pull on the umbilical cord
 - Want baby at the level of the placenta
 - Do not hold baby too high



Delivery

Delayed Cord Clamping:

- Do not need to rush to cut the cord
 - Typically wait 1 minute until clamping cord
 - Will need to clamp and cut sooner if baby is having distress or needs ventilation



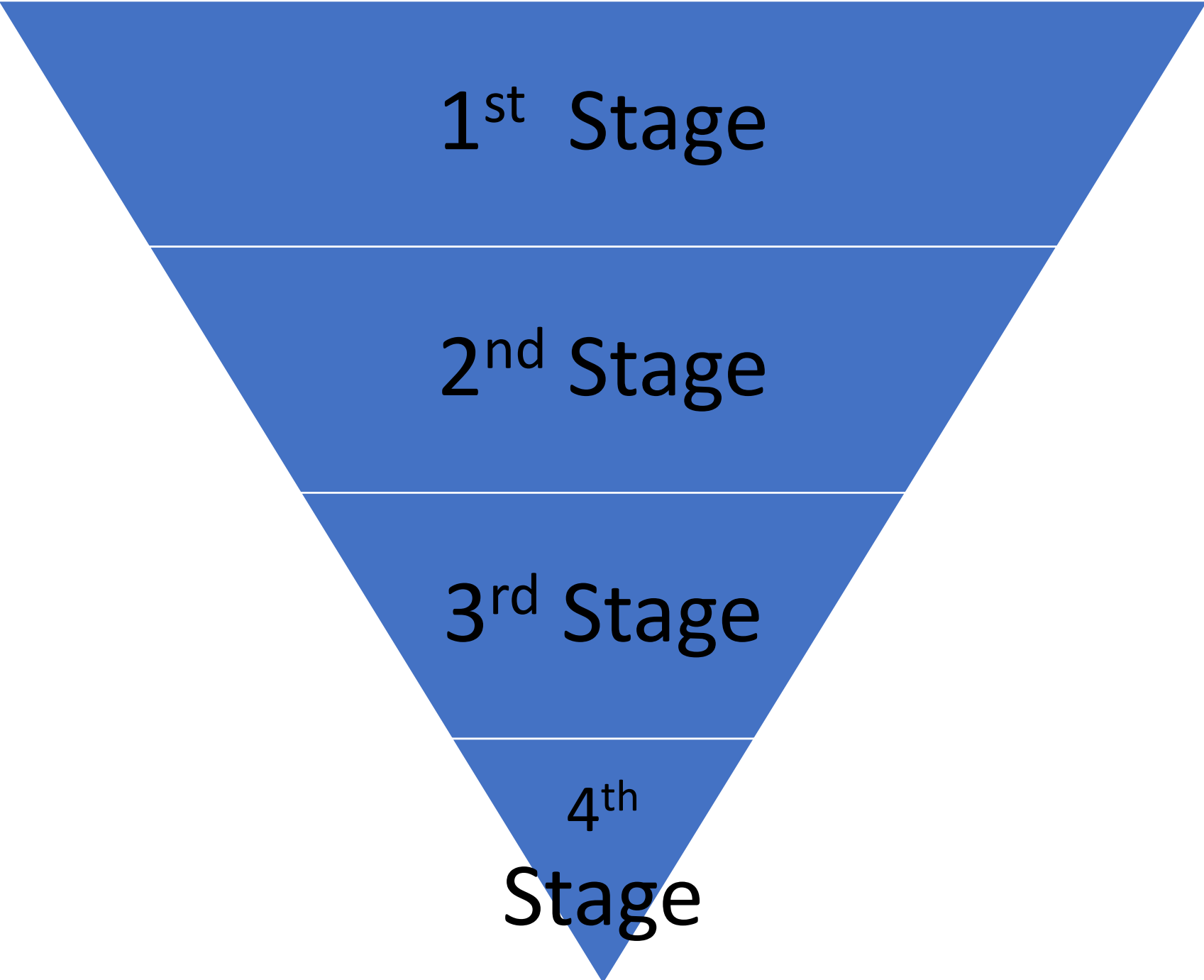
Questions?



Now What ???

Managing the 3rd and 4th Stage of Labor





1st Stage

2nd Stage

3rd Stage

4th
Stage



3rd Stage

Interval from the delivery of the baby to the separation and expulsion of the placenta
~ 5 – 10 minutes
Shortest stage of labor

4th Stage

A stage during childbirth that starts with delivery of the placenta and lasts about 2 hours after delivering the baby
<http://ncit.nci.nih.gov>

Complications During the 3rd and 4th Stage of Labor

Post Partum Hemorrhage (Most Common)

Retained Placenta

Inversion of Uterus

Shock

GOAL

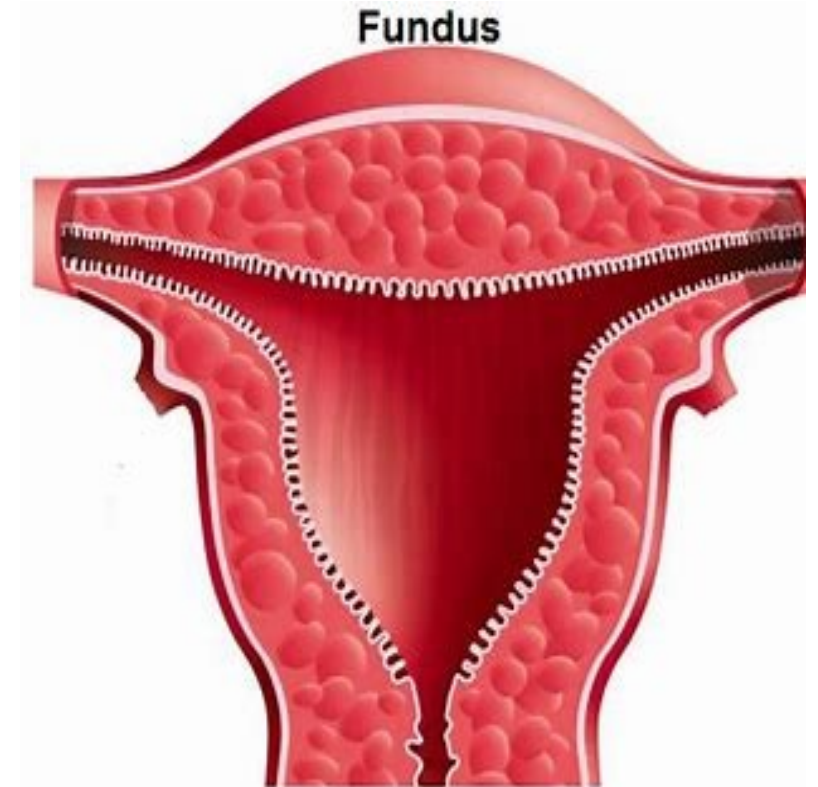
#

1

Prevent Post
Partum
Hemorrhage

Fundus

- [Uterus Massage - Appropedia:
The sustainability wiki](#)



Uterine Tone

Boggy



Firm



Common Medications Given in Third Stage



Oxytocin



Cytotec

Methergine

Hemabate

TXA



Pitocin/oxytocin

- Preferred uterotonic
 - pharmacological agents used to induce contraction or greater tonicity of the uterus
- Supplied 10 units/ml
- Recommended dose 10 to 40 units in 500-1000 ml IVF
 - Normal Saline
 - Lactated Ringers
- Most frequently studied prophylactic dose is 10 units/500 ml over 1 hour or titrated to uterine tone [citation]
- 30 units to 500 ml Normal Saline
 - 300 ml/hr 1st hour
 - 150 ml/ hr 2nd hour
- 10 units IM
- Titrate to uterine tone and bleeding



TXA (Tranexamic Acid)

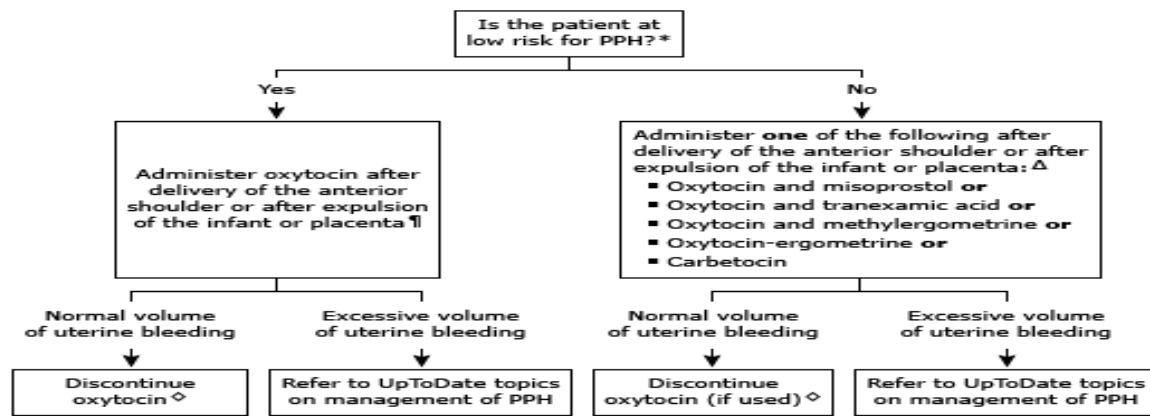
- Off Label Use
 - Severe bleeding requiring massive transfusion protocols
 - When hyper-fibrinolysis is demonstrated
 - Trauma patients
 - May be utilized in any patient at significant risk of hemorrhage
 - Post Partum Hemorrhage
- Administration:
 - 1 gm bolus in 100 ml of NS over 10 minutes
 - May repeat 1 gm dose of the next 8 hours
 - Do not exceed 2 gms

Cytotec - misoprostol

- Cheap and Stable
- 600 mcg buccally or sublingually – single dose when injectable uterotonics are not available
 - WHO and The International Federation of Obstetrics and Gynecology
- 800 mcg = 40 IU IV oxytocin c
- Rapid onset – 10 to 15 minutes
- Can repeat 2 hours after 1st dose administered
- Side Effects:
 - Shivering and fever (20 minutes with peak at 1 – 2 hours.)

[Prevention of postpartum hemorrhage with misoprostol - PubMed \(nih.gov\)](#)

Choice of uterotonic drugs for managing the third stage of labor



Excessive uterine bleeding is a subjective clinical diagnosis based on the judgment of an experienced obstetric provider.

PPH: postpartum hemorrhage.

* There is no consensus regarding the precise criteria that distinguish patients who are at low risk for PPH from those who are at higher risk. A patient can be considered low risk for PPH if they have a singleton gestation and a past history of ≤ 1 previous cesarean deliveries, ≤ 4 previous spontaneous vaginal deliveries, no bleeding diathesis, no PPH, no large fibroids, and no pregnancy complications that increase the risk for bleeding at delivery. Refer to UpToDate topic on overview of PPH. Another approach is to treat **all** patients as high risk for PPH using one of the drug regimens described above for patients not at low risk.

† Oxytocin: 10 to 40 international units of oxytocin in 500 to 1000 mL of 0.9% saline, with the rate of infusion adjusted up to 500 mL/hour, until the uterus is contracted. The rate is then decreased (eg, 1 to 2.5 international units/hour) as long as uterine tone is maintained and bleeding is not excessive.

Δ Available data suggest that these regimens are similarly effective for reducing the risk for PPH.

Dosing:

- Oxytocin intravenous infusion: 10 to 40 international units of oxytocin in 500 to 1000 mL of 0.9% saline, with the rate of infusion adjusted up to 500 mL/hour, until the uterus is contracted.
 - The infusion rate is then decreased (eg, 1 to 2.5 international units/hour) as long as uterine tone is maintained and bleeding is not excessive.
- Misoprostol 200 to 400 mcg buccally or sublingually, single dose.
- Tranexamic acid 1 g intravenously over 10 minutes, single dose.
- Methylergometrine 0.2 mg intramuscularly, single dose.
- Oxytocin-ergometrine (combination drug oxytocin 5 units plus ergometrine 0.5 mg) intramuscularly, single dose. Not available in the United States.
- Carbetocin 100 mcg intravenously over 1 minute, single dose. Not available in the United States.

◊ The total oxytocin infusion time in patients with a normal uterine tone and volume of bleeding varies among providers; a minimum of 4 hours after birth is common.

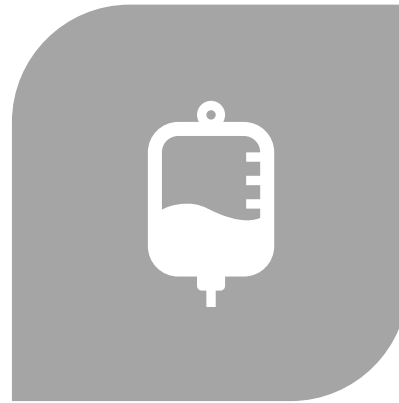
Active Management in Resource- limited Settings

Nipple Stimulation –
releases endogenous
oxytocin

Breast Feeding – same
as nipple stimulation



ASSESS VITALS EVERY 15 MIN X 2 HOURS
UTERINE TONE



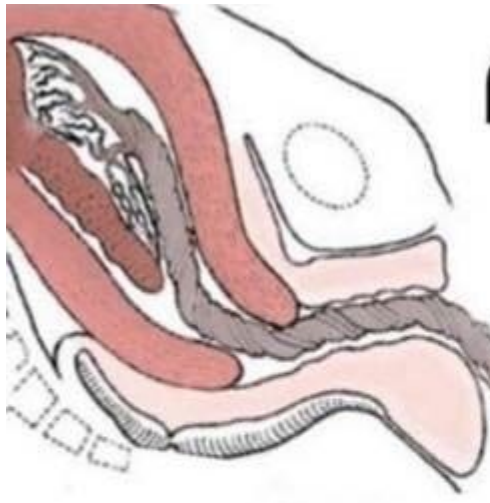
CUMULATIVE BLOOD LOSS



1 GM = 1 ML

Delivery of the Placenta

- Sudden gush of blood
- Lengthening of the visible portion of the umbilical cord
- Uterus becomes firm and round
- Uterus, the top of which is usually about half-way between the pubic bone and the umbilicus, seems to enlarge and approach the umbilicus
- Patient might feel a few painful cramps as the placenta separates
- Feel urge to bear down and push as placenta descends through the birth canal



“

At the moment a baby is born, 1/3 of their blood is still outside their body. **If you delay cord clamping for 90 seconds they get 60% more blood cells.**

They get enough **iron** to last them through their first year.

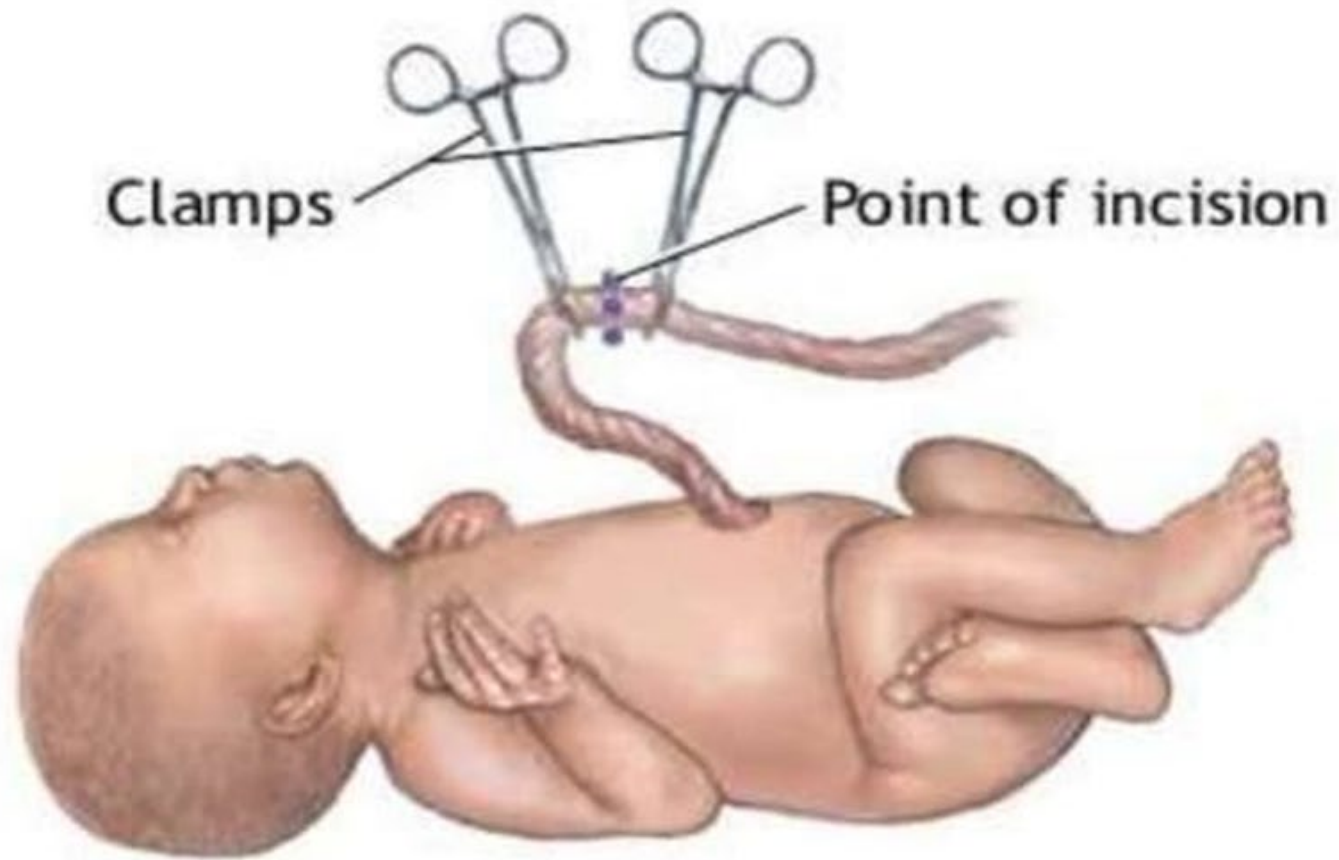
They get **White blood cells** to fight infection.

They get **antibodies**. They get **stem cells** to help repair the body.”



©MOOMYSMILK

- Dr. Alan Greene



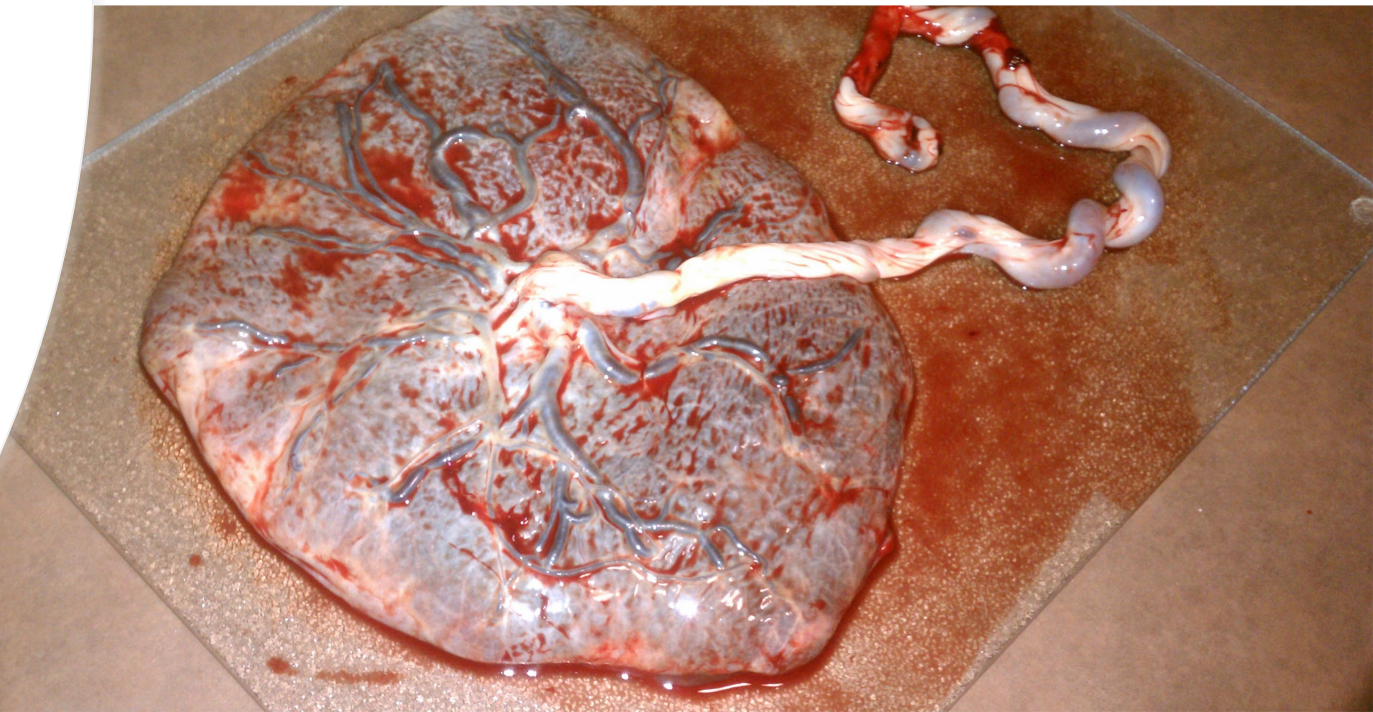
clamp and cut of the umbilical cord

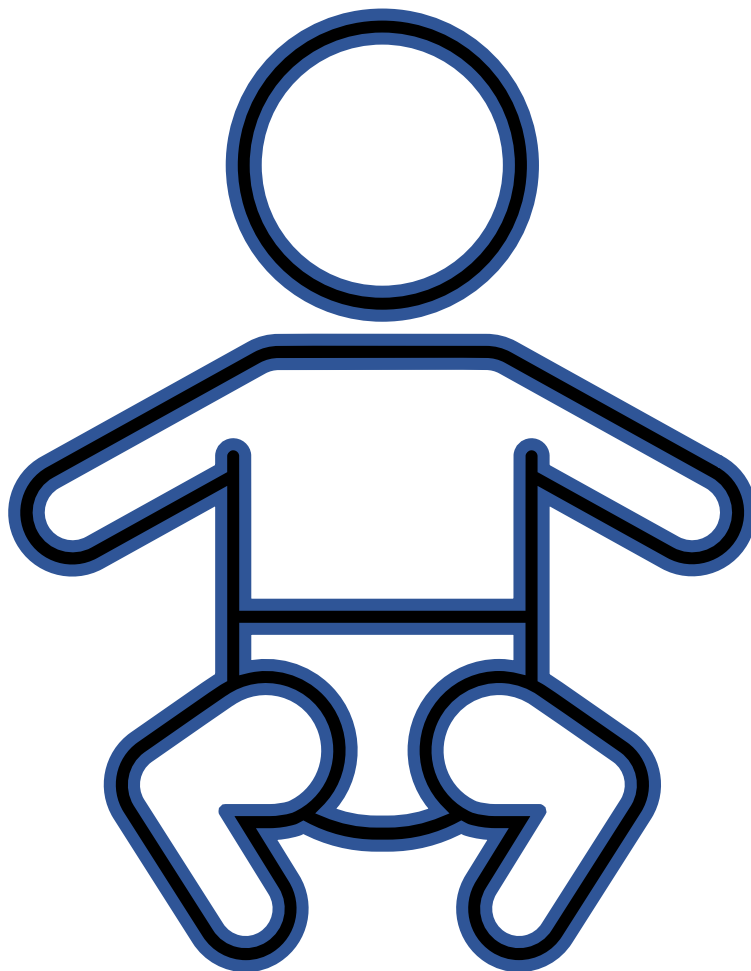
Placenta

Save

Intact?

Can leave attached





Initial Assessment

Breathing or Crying

Tone

HR > 100

Initial Steps

Warm

- Warm Blankets
- Skin to Skin with mom

Dry

- Warm Towel
- Keep Dry

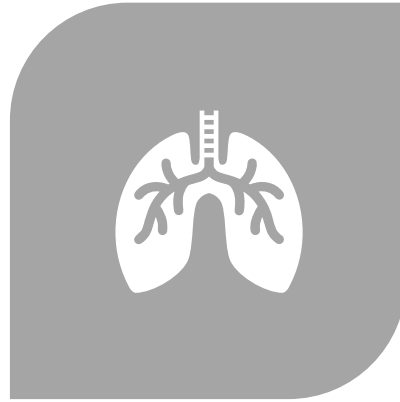
Stimulate

- Gently rub back
- Flick bottom of feet

Ventilation



CHEST RISE



LUNG SOUNDS



RISING HEART RATE

Ventilation

Cry

- Ventilation

Positive Pressure Ventilation

- Not breathing
- Gaspings
- Heart Rate less than 100

Bag Mask

- Start at 20 mmHg Pressure
- 40 – 60 Breaths per minutes
- [NRP - Positive Pressure Ventilation with Face Mask - Bing video](#)

LMA

- Size 1

PPV

Bag Mask



LMA/ i-Gel



References

- [Guidelines for Active Management of the Third Stage of Labor using Oxytocin: AWHONN Practice Brief Number 12 - Journal of Obstetric, Gynecologic & Neonatal Nursing \(jognn.org\)](#)
- [Sign In – UpToDate](#)
- [Prevention of postpartum hemorrhage with misoprostol - PubMed \(nih.gov\)](#)
- [Delivery of the Placenta \(jhmi.edu\)](#)

Questions/Comments

