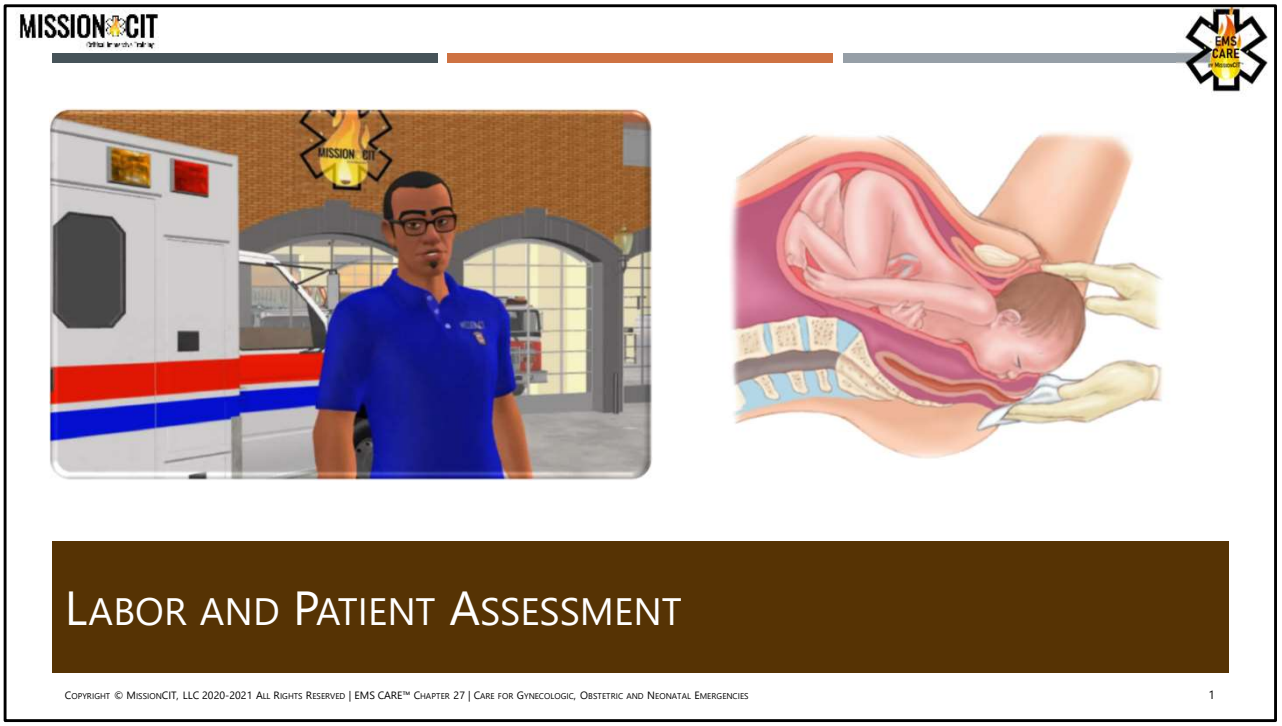


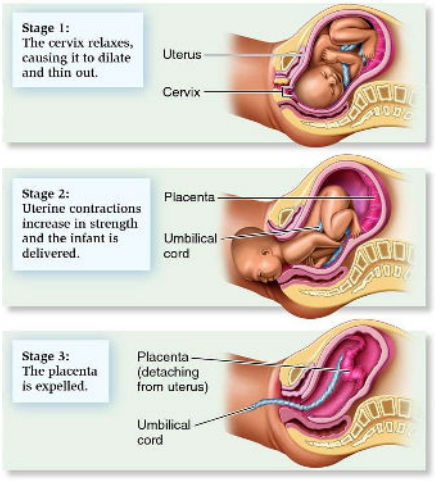
Thank you Missah. In this lesson we will discuss the three stages of Labor, followed by how to assess a patient in labor.

Remember, all things being equal, we prefer to have babies at the hospital. But when that's not possible, we have to be ready to assist.

Good Studying

The Three Stages of Labor

- First stage: Starts with regular contractions and ends when cervix fully dilated
- Second stage: Baby enters birth canal and is delivered
- Third stage: Begins after baby is delivered and ends when placenta is expelled



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So, the First stage of labor Starts with regular contractions and ends when the cervix is fully dilated. The

The second stage begins when the baby enters the birth canal and culminates with delivery.

Remember, at this point, you now have a second patient to manage.

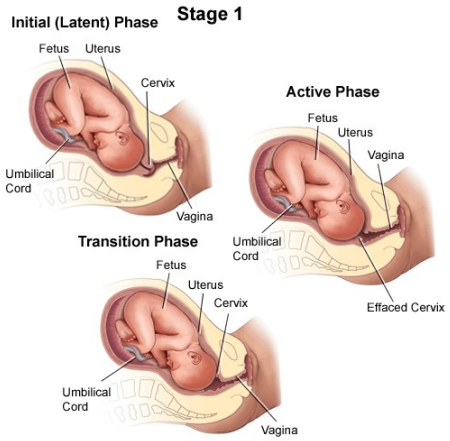
And finally, the Third stage begins after the baby is

delivered and ends when the placenta is expelled. You may have 5-15 minutes before this happens. And the mother needs attention and is undergoing huge changes to her body in a very short time.

By the way, some journals document a fourth stage of labor as Recovery when the mother and baby begin the nursing process. This should occur as soon as Mom is ready, after delivery of the afterbirth.

First Stage of Labor | Dilation Stage

- Characteristics of labor pains
- Contraction time, or duration
- Contraction interval, or frequency
- When they last 30 seconds to 1 minute and are 2-3 minutes apart, delivery of the baby may be imminent
- Rupturing of amniotic sac
- Fluid with meconium staining indicates that there may be fetal distress



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So, stage 1 labor or dilation stage has three phases, beginning with the onset of true labor contractions, and ending with a fully dilated and effaced cervix.

The first of the three is the Early Labor Phase that begins with the onset of labor, and ends when the cervix is dilated to 3 cm.

The second is the Active Labor Phase that Continues from 3 cm. until the cervix is dilated to 7 cm.

The final phase is the transition Phase that Continues from 7 cm. until the cervix is fully dilated to 10 cm.

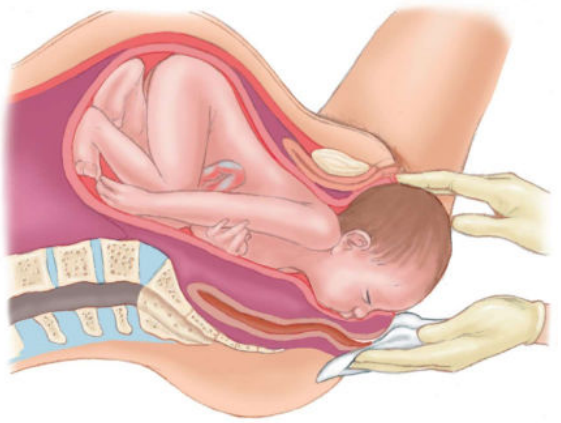
Effacement occurs as the cervix, usually elongated, thins out as it is dilated. The mucus plug is discharged during this stage.

Clinically, labor is said to have started when cervical dilation has occurred. This cannot be determined by EMS providers in the field, so you should be familiar with other clinical indicators that your patient has entered labor, including the rupturing of the amniotic sac and the release of the amniotic fluid. You will often hear patients say that their water has broken and this is your clue.

Other indicators include contractions of increasing frequency and duration, feeling a need to defecate, perineal bulging during contractions, and crowning.

Second Stage

- Full dilation of cervix
- Contractions increasingly frequent
- Labor pain severe
- Mother feels urge to push or move bowels
- EMT will have to decide whether to transport the patient or keep her where she is and prepare to assist with delivery



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The second stage of labor begins when the cervix is completely dilated and ends with the birth of the baby. Contractions push the baby down the birth canal, and the mother may feel intense pressure, similar to an urge to have a bowel movement.

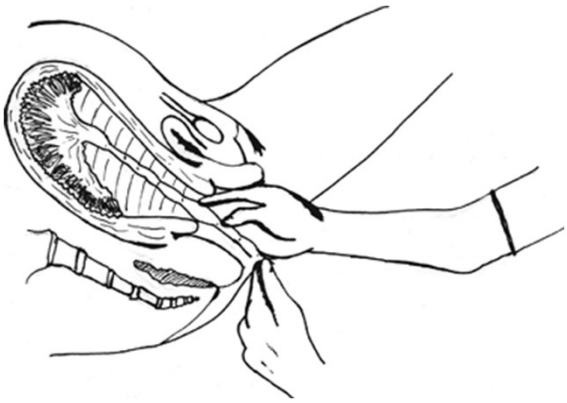
The contractions continue to be strong, but they may spread out and give the mother some time to rest. The length of the second stage depends on whether the mother has given birth before and how many times, and the position and size of the baby.

Some things to help set expectations for the mother include:

- The second stage can last from 20 minutes to 2 hours.
- Contractions will last about 45-90 seconds at intervals of 3-5 minutes of rest in between.
- There will be a strong natural urge to push.
- The mother will feel strong pressure at the rectum.
- The patient is likely to have a minor bowel or urination accident.
- The baby's head will eventually crown.
- The Mother may feel a burning, stinging sensation during crowning.
- During crowning, tell delivering mother not to push.

Third Stage of Labor | Afterbirth delivery

- After baby's birth, contractions resume until placenta is delivered
- Usually lasts 5 to 15 minutes
- Guide the placenta out as it begins to appear at the vaginal opening



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The third stage of labor refers to the period that starts immediately after delivery of the infant and ends with the completed delivery of the placenta and its attached membranes.

There is a significant risk of hemorrhage during this stage. All patients require close monitoring and routine prevention of postpartum hemorrhage, or PPH in short.

This stage usually lasts 5 to 15 minutes.

- After the infant is delivered, there is a rest period without contractions that lasts, on average, 10 minutes. Use this time to take care of the neonate. Watch the mother carefully for signs of PPH, which can occur at any time.
- Then, contractions resume, and the placenta separates spontaneously. On abdominal palpation the uterine fundus can be felt ascending and then descending again, corresponding to the migration or descent of the placenta. When the entire placenta has reached the vagina, the uterus retracts and forms a hard ball above the pubic bone.
- The blood loss accompanying delivery of the placenta should not exceed 500 ml.

In the absence of PPH, a maximum delay of 30 to 45 minutes is tolerated for the expulsion of the placenta. After that, the placenta should be removed manually.

Assessing the Woman in Labor

- Assessment focused on imminent delivery
- Name, age, expected due date
- First pregnancy?
- Has patient seen doctor about pregnancy?
- When did labor pains start?



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Assessment of the woman in labor is designed to predict imminent delivery and to recognize likely resuscitation of the neonate. Assessment can also help indicate the level of resources necessary to deliver the baby.

An imminent delivery should be anticipated when you note the perineum bulging during each contraction.
This occurs before crowning, when the head is visible as it protrudes from the vagina.
Should a patient describe any of the above-listed

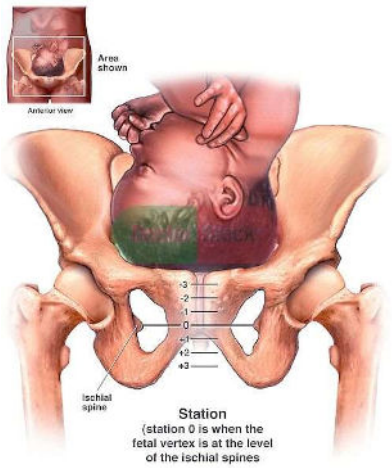
signs or symptoms you should perform an external exam of the vagina for perineal bulging or crowning, as it indicates that it is time for delivery.
If a patient's water has broken, and or if the patient describes contractions that are increasing in frequency and duration but no perineal bulging or crowning is present, then you may have time to consider a rapid transport to an emergency department or obstetrics facility for childbirth.

At this point, you should at a minimum, obtain the Location of pain, radiation of pain, time of onset of contractions, the interval between contractions, quality of contractions, the severity of contractions, events surrounding the onset of contractions, and the due date.

Note that possible contraindications to vaginal delivery before crowning include vaginal bleeding, "bloody show," leakage of fluid or discharge, a need to "push," "bear down" or have a bowel movement, presence of fetal movement, RUQ pain, vomiting, and visual changes.

Assessing the Woman in Labor | Crowning

- Urge to push + crowning = imminent delivery
- ABCs
- SAMPLE protocol
- Secondary Assessment
- Have sufficient assistance



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The urge to push and crowning indicates imminent delivery. Transport typically should be deferred to ready for delivery on the scene. Be sure you have proper assistance as you will soon have 2 patients. Having ALS and Medical Control available is a good idea.

Be sure to follow protocol and take vitals. The initial exam should be ABCs. Monitor Blood Pressure, Heart Rate, Respiration, and Frequency of Contractions.
Then follow the SAMPLE protocol. Obtain the list of

Allergies or Medications that the patient is using, Past medical history, past surgical history, number of previous pregnancies, previous Cesarean delivery, prenatal care, Previous pregnancy or delivery complications such as eclampsia, precipitous delivery, etc, Recent infectious diseases, Complications of current pregnancy like preeclampsia, placenta previa, gestational diabetes, premature labor, an ultrasound showing abnormal fetal position, etc, and finally, the Time of Last meal.

In the Secondary assessment, look for

- Cracked lips, sunken eyes, or cheeks indicating dehydration
- Cool or pale skin
- Labored breathing
- Tachycardia
- Scars, Tenderness, and masses in the abdomen, uterine size or location, distention, deformity of the uterus,
- Swelling in the legs
- Altered Mental status
- Vaginal bleeding, infant head crowning, prolapsed cord, presenting part, and meconium staining

Reach out for help if you see any of the above conditions.

Indications for Neonatal Resuscitation | Pre-Delivery

- No prior prenatal care
- Premature delivery
- Labor induced by trauma
- Multiple births
- History of pregnancy problems (especially placenta previa and breech presentation)
- Labor induced by drug use (especially narcotics)
- Meconium staining when water breaks



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During the SAMPLE assessment, you should determine if there are indications for neonatal resuscitation. Look for a lack of prenatal care, premature labor, and underlying maternal medical conditions indicate a likelihood of neonatal resuscitation. In addition, other high-risk conditions may include:

- Labor induced by trauma
- Antepartum hemorrhage
- Multiple births
- History of pregnancy problems (especially placenta previa and breech presentation)

- Labor induced by drug use (especially narcotics)
- Meconium staining when water breaks

If any of these conditions are present, alert medical control and ALS and get as much trained help onsite as possible.

So that’s it for this lesson. Missah will be with you next to discuss normal childbirth.

Good studying.