



Caring for the Neonate and Mother Post-delivery

Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

Welcome to lesson 4! In this lesson, we will talk about providing the right neonatal care for the newborn baby. Also, we look at the different ways by which you can support the mother after the delivery.
Good studying.

Assessing the Neonate

- As soon as they are born
- Protocol usually calls for noting ease of breathing, heart rate, crying, movement, and skin color
- APGAR score
- Does not guide resuscitation efforts
- Based on Appearance, Pulse, Grimace, Activity, and Respiratory effort



Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

Once the baby is born, you must assess the newborn. Of course, the first thing to do is to ensure that the baby is breathing fine.
As an EMT, you have to assist in checking the baby's ease of breathing, heart rate, and crying. Remember, crying is important for a newborn because that's when the baby takes in the first gulp of air. In fact, you should be a bit concerned if the baby doesn't cry.
Besides the above, check if the baby is making any movement and look for the skin color. As a

matter of fact, skin color is an important index of cardiorespiratory function, and hence, this is one of the first things you must see.
In general, the color of the skin should be a pinkish hue, depending on the skin color. If the child is dark-skinned, check the mucous membranes, as they are a more reliable indicator of the baby's respiratory health.
Overall, the respiratory rate should be about 40 to 60 breaths per minute.
The next thing you should is calculate the APGAR score. This is a score from 1 to 10, and the higher the score, the healthier is the baby.
So, what is this APGAR score. This acronym stands for Appearance, Pulse, Grimace, Activity, and Respiration. Here, appearance is the skin color, pulse is the heart rate, grimace is the response of the baby to a stimulus, activity is the baby's muscle tone, and respiration is the baby's ability to breathe. A score of 7 or greater is considered normal while a score of less than three is critical.

Caring for the Neonate | Keeping the baby warm

- Heat retention is high priority
- Dry baby
- Discard wet blankets
- Wrap baby in a dry blanket
- Infant swaddler or "space blanket"
- Cover head
- Encourage



Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

While the APGAR score is being calculated, make sure to keep the baby warm. Remember, just until a few minutes ago, the baby was in the mother's womb, a rather warm and cozy place. So, it can take a few minutes for the baby to get used to the outside temperature, and until then, heat retention is necessary.

As a first step, dry the baby completely with a towel, discard the wet blankets, and wrap the baby in a dry blanket. Ideally, swaddle the baby, and don't just wrap a towel around it. If you've never done it before, swaddling is a great way to give a warm and

cozy feel to the baby.
To swaddle, put the baby on a blanket. Next, take the blanket from the right side and tuck it below the left arm. Then, take the bottom of the blanket and put it all the way up to the neck, and finally, take the blanket from the left side, and tuck it below the right arm. That's it! While swaddling, ensure that it is not too tight and at the same time, check if the arms are by the side of the body.
After swaddling, cover the head with a cap.

Caring for the Neonate | Umbilical Cord Management

- Keep infant warm
- Use sterile clamps or umbilical tape
- Apply one clamp about 10 inches from the baby
- Place a second clamp about 7 inches from the baby



Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

The next important task is to manage the umbilical cord. This is a long tube-like structure that connected the fetus with the placenta in the uterus, and provided the essential nutrients needed for the fetus to grow. Once the baby is born, you can cut the cord.

Now, it merits to know that until recent years, the umbilical cord was commonly clamped soon after birth to quickly transfer the infant to the neonatal team for stabilization. The 2010 and 2015 international consensus on science review processes

identified evidence suggesting that delayed cord clamping might be beneficial for infants that did not need immediate resuscitation at birth.
When you are ready to cut the cord, put two sterile clamps on either end of the cord, and cut off the tube in between. Put the first clamp about 8 inches to 10 inches from the baby, and the second clamp at about four finger widths. Finally, cut the cord when the pulsations stop.

Caring for the Neonate | Cutting the umbilical cord

- Circumstances necessitating cutting
- If cord wrapped around baby's neck and cannot be slipped over head
- If attachment impedes resuscitation effort
- If attachment interferes with urgent need for transport of mother or baby
- If protocol requires it



Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

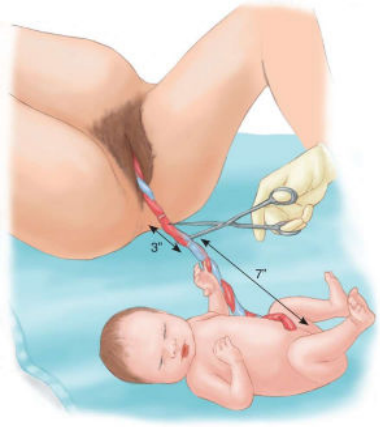
There are times when you will have to cut the cord earlier. In general, if a cord is wrapped around the baby's neck, gently try to remove the cord from the neck, before delivering the baby. Once the baby is delivered, follow the normal cutting process.

But, if you're unable to remove the cord, cut it right away to ensure that it does not block the baby's airways.
Likewise, cut the cord if you have to transport

the mother and the baby, and the cord impedes it. Also, cut the cord if it interferes with resuscitation efforts or if the protocols require you to do that.

Caring for the Neonate | Cutting the umbilical cord

- Cut the cord between clamps using surgical scissors
- Be careful when moving the baby so no trauma is brought to the clamped cord
- Place the baby on the mother's abdomen after the birth process

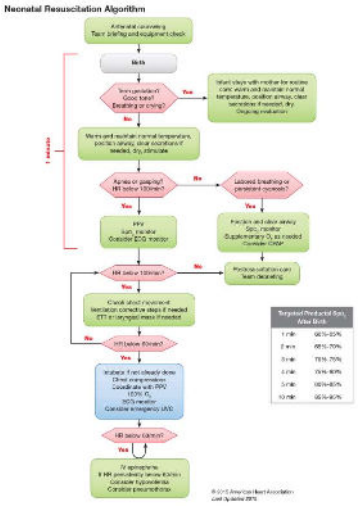


Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

While cutting the umbilical cord, keep some things in mind. First off, use sterile clamps and surgical scissors, so you can get the perfect cut. Next, while cutting the cord, make sure there is no trauma for the baby. Also, reduce any sudden jerks or movements that can alarm the baby. Finally, after cutting the cord, put the baby on the mother's abdomen for the all-important skin to skin contact.

Indications for Neonatal Resuscitation

- 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



Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

Newly born infants that do not require resuscitation can be generally identified upon delivery by rapidly assessing the answers to the following 3 questions:

- What was the gestation term?
- Did the baby have a good skin tone at the time of birth?
- Was the baby breathing or crying?

If the answer to all 3 questions is “yes,” the newly born infant may stay with the mother for routine care. Routine care means the infant is dried, placed skin to skin with the mother, and covered with dry linen to maintain a normal temperature. Observation

of breathing, activity, and color must be ongoing. If the answer to any of the three assessment questions is “no,” the infant should be moved to a radiant warmer.

Besides the above three questions, the circumstances of the birth may warrant neonatal resuscitation. If the baby is born prior to 37 weeks of gestation, it is considered a premature delivery, and the baby may require some help to breathe.

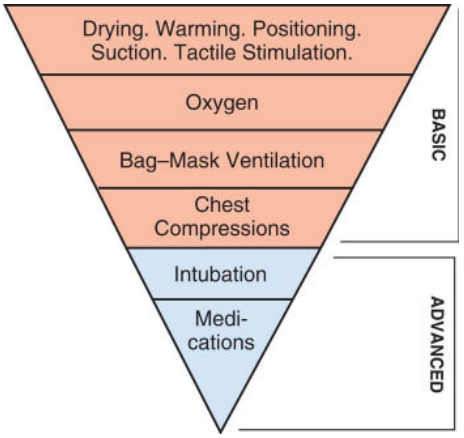
Likewise, if the labor is induced by trauma, or if the mother has a history of pregnancy problems such as placenta previa and breech presentation, you’ll have to watch out for signs.

Other possible situations when a newborn would require resuscitation include labor induced by drugs, especially narcotics, and meconium staining on the baby when the water breaks.

So, stay vigilant and look for signs that indicate that the baby needs neonatal resuscitation.

Neonatal Resuscitation

- Provide warmth and assess baby's airway
- Establish that the baby is breathing
- Evaluate respirations, heart rate, and muscle tone
- If shallow, slow, gasping, or absent, provide positive pressure ventilation at a rate of 40 to 60 per minute



Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

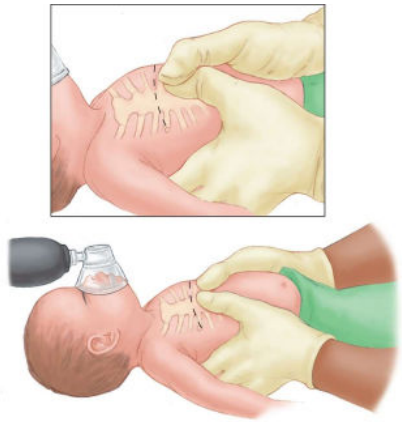
If the baby shows signs of breathing difficulty, provide neonatal resuscitation right away. You must do one or more of the following 4 actions in sequence:

First off, stabilize the baby's temperature and position. Next, clear any secretions in the nose that could be obstructing the airways, and now check if the baby can breathe by itself. If you think the baby still has breathing difficulties, dry the baby and do a tactile stimulation by rubbing the back or soles of the baby.

After doing all this, check if the baby is breathing, and evaluate the respirations, heart rate, and muscle tone. If the infant is still having breathing difficulties, and if the heart rate is less than 100 beats per minute, ventilate with a BVM at the rate of 40 to 60 per minute. In the meantime, call for Advanced Life Support for immediate back-up.

Neonatal Resuscitation

- Assess infant's heart rate
- If less than 100 bpm, provide above artificial ventilations
- If less than 60 bpm, initiate chest compressions at 120 compressions per minute
- If adequate respirations and a pulse greater than 100 bpm, reassess the airway

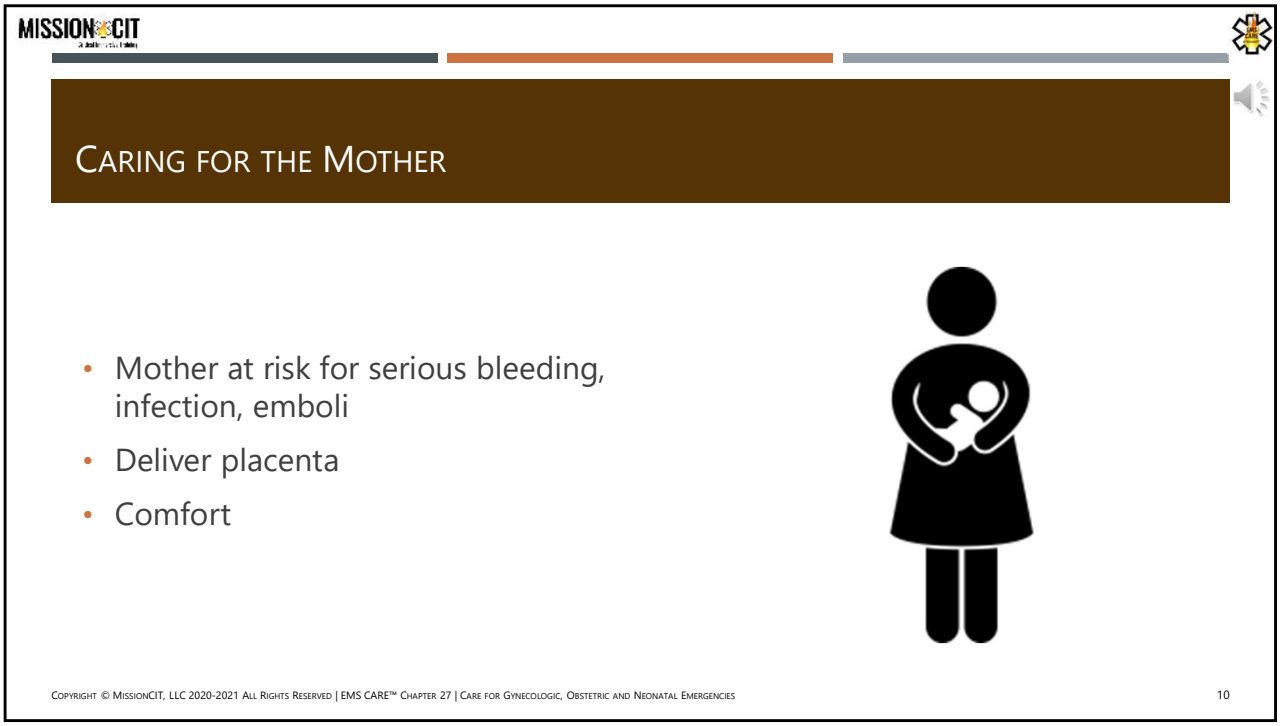


Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

Now, you have about 60 seconds or the Golden Minute to begin ventilation and that is why you must avoid unnecessary delay in initiating the ventilation. All along, continuously assess the baby for two vital characteristics, which are, respiration, and heart rate. If the baby has apnea, or is gasping for breath, or seems to have labored breathing, check the heart rate.

If the rate falls below 60 beats per minute, start chest compressions right away at the rate of 120 compressions per minute. After a couple of minutes,

reassess the baby’s breathing and if the pulse has moved to more than 100 beats per minute, assess the airway to see if the breathing is regular.



Besides handling the baby, you must support the mother as well, and provide the best possible care for her.

Though there's a greater focus on the baby after it is born, remember that the mother is also a patient, as she is at risk for uncontrolled bleeding, and there's also the possibility for infection and emboli. So, watch out for these signs and help the mother to recover.

Another important task that's left for you is to assist in delivering the placenta. Gently encourage the mother to push hard again to move the placenta out of her body. As she pushes it, you can see the placenta coming out through the vagina. Keep your hands near the opening and take it out as soon as you see it.

Once the placenta is out, get ready to transport the patient in about twenty minutes.

Delivering the Placenta

- Afterbirth
- Placenta with umbilical cord, amniotic sac membranes, and tissues lining uterus
- Placental delivery starts with labor pains
- May take thirty minutes or longer
- Guide the placenta out as it begins to appear at the vaginal opening
- Retained placenta



Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

While delivering the placenta, make sure that it comes with the umbilical cord, amniotic sac membranes, and tissues lining the uterus. The placental delivery starts with the labor pain, and it could take about thirty minutes after childbirth to come out.

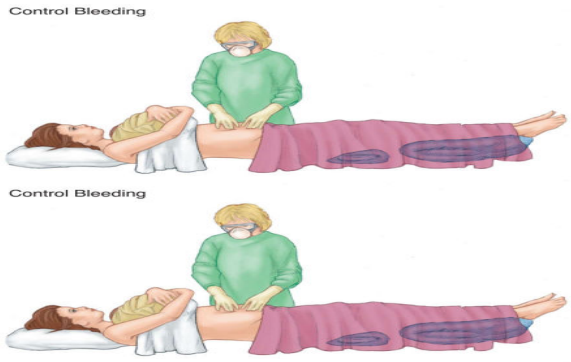
Sometimes though, a part of the placenta may still be in the womb, and this is called retained placenta. If that happens, put the mother on an intravenous drip, and request the doctor to do

a vaginal examination to see if a surgery is needed to remove the placenta. In the meantime, offer pain relief for the mother, and comfort her in the best way possible.

Keep in mind that placenta must be removed within a few hours after delivery to avoid hemorrhage, so reach out for help, if a part of all of the placenta is not delivered within an hour after birth.

Controlling Vaginal Bleeding after Birth

- Place a sanitary napkin over the mother's vaginal opening. Do not place anything in the vagina
- Have the mother lower her legs and keep, but not squeeze, them together
- Massaging the uterus will help it contract, which controls the bleeding
- Encourage the mother to begin nursing the baby



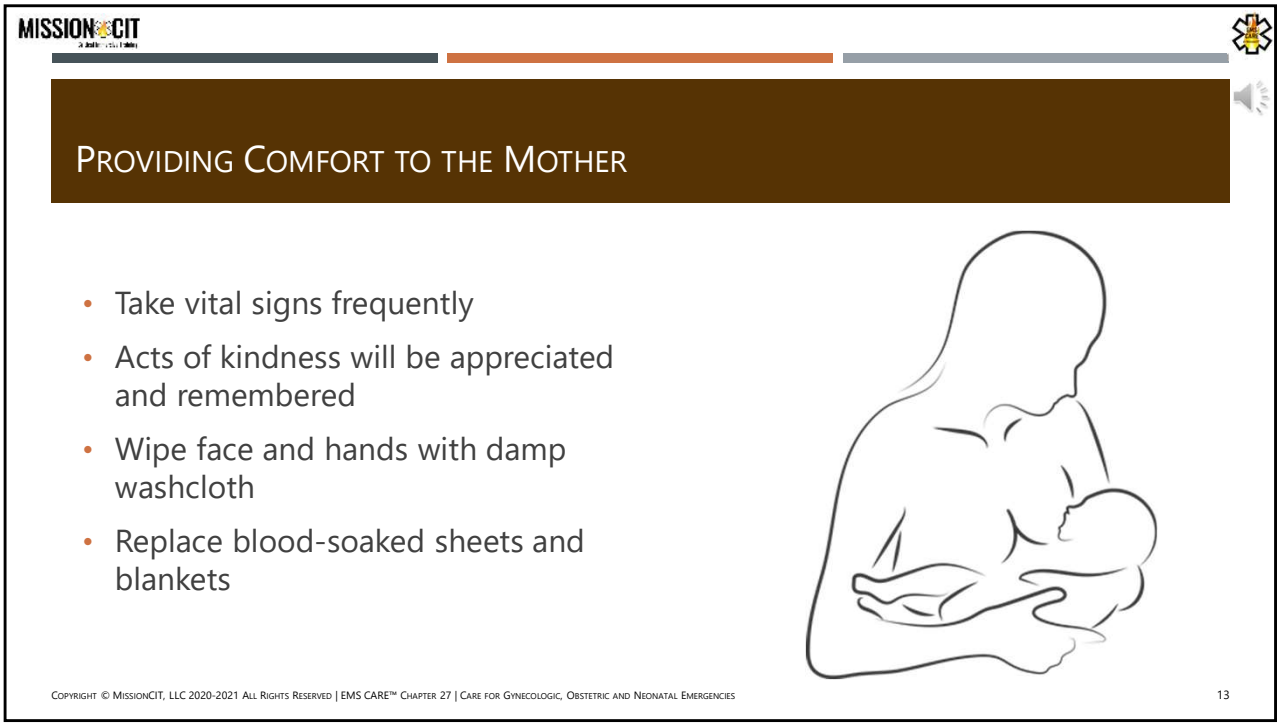
Copyright © MissionCIT, LLC 2020-2021 All Rights Reserved | EMS CARE™ Chapter 27 | Care for Gynecologic, Obstetric and Neonatal Emergencies

As soon as the placenta is delivered, the bleeding will start. Place a sanitary pad over the mother's vaginal opening, and make sure there is nothing else obstructing the vagina.

Next ask the mother to lower the legs, and help her if needed to keep her legs straight. Make sure that the legs are not squeezed towards each other. In fact, there should be no pressure on the legs, and it should be relaxed.

Next, massage the uterus to contract it, as this will reduce the bleeding greatly. While doing this massage, talk to the mother to see if she needs anything like water. Also, encourage her to nurse the baby

In the case of normal deliveries, the chances of bleeding go down after the placenta is delivered. However, if the bleeding is uncontrolled, drugs such as oxytocin or ergometrine are given by the doctor. Extreme cases of bleeding many also require an examination under anesthesia. So, watch out for signs, and inform the doctor right away.



After delivering the baby and the placenta, the bleeding should come back to normal. At this time, the mother must be able to communicate with others and nurse the baby.

Now, you must check the vital signs frequently, and offer to help the mother in any way you can. Remember, she has gone through the amazing process of delivering a new life, so any act of kindness from your end will be highly appreciated.

Wipe her down and remove the soaked blankets as

needed. And finally, comfort her in every way you can.

With this, we come to the end of this lesson. Next, Missah will take you through childbirth complications.