



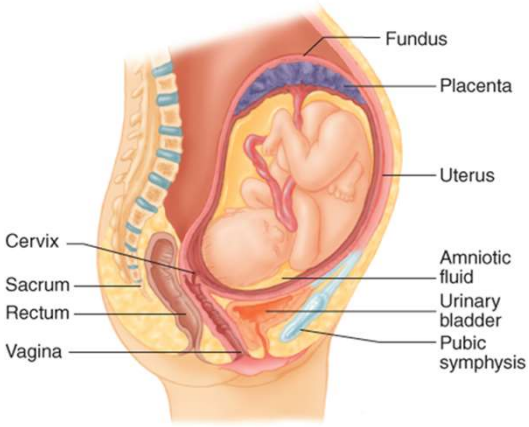
Chapter Review

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Welcome to the chapter review for Gynecologic, Obstetric and Neonatal Emergencies. Here we quickly recap all the lessons we have studied so far. Remember, there is a quiz following the review. You need to score 75% or better to get credit for this topic. Good studying.

Chapter Review:
Anatomy and Physiology of the Female Reproductive System

- External and internal genital organs
- Menstrual cycle
- Fertilization
- Embryo and fetus
- Changes in the mother's body



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The female external genital organs include the mons pubis, labia majora, labia minora, Bartholin glands, and clitoris. The area containing these organs is called the vulva. The role of these organs is to enable the sperm to enter the body, protect the internal genital organs from infectious organisms, and provide sexual pleasure.

The next is the internal genital organs that include the vagina, uterus or the womb, cervix, ovaries, and the fallopian tubes, and these organs are involved in pregnancy and childbirth.

Moving on, menstruation is the shedding of the lining of the uterus called the endometrium and is accompanied by bleeding. It occurs in approximately monthly cycles throughout a woman's reproductive life, except during pregnancy. Menstruation starts during puberty and stops permanently at menopause.

During the ovulation phase, the cervix becomes fluid, thereby making it easy for the sperm to enter the uterus through the fallopian tube, and fertilize the egg. About 6 days after fertilization, the blastocyst attaches to the lining of the uterus, usually near the top and the wall of the blastocyst is one cell thick except in one area, where it is three to four cells thick. The inner cells in the thickened area develop into the embryo, and the outer cells burrow into the

wall of the uterus and develop into the placenta.
Next, the embryo develops within the amniotic sac, and it slowly turns into a fetus with the growth of the internal organs and the external body structure. As the fetus grows, the mother's body changes to accommodate the growing fetus. Some of the most prominent physiological changes occur in the cardiovascular, respiratory, gynecological, gastrointestinal, urinary, and endocrine systems.

Chapter Review: Labor And Patient Assessment

- Three stages of labor
- First stage: Starts with contractions and ends with cervical dilation
- Second stage: Starts when the baby enters the birth canal and ends with delivery
- Third stage: Starts with delivery and ends with placental removal
- Watch for pregnancy and childbirth complications

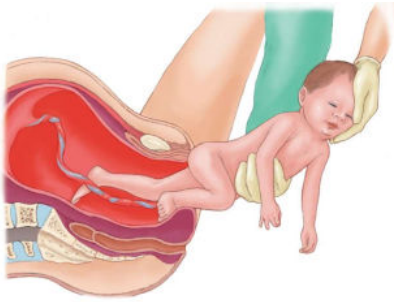


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This lesson on labor and patient assessment starts with the three stages of labor. The first stage starts with regular contractions and ends when the cervix is fully dilated, the second stage starts when the baby enters the birth canal to until it is delivered, and finally, the third stage starts after the baby is delivered and ends when the placenta is expelled.
All three stages are critical, hence require the right care. It all begins with assessing whether the woman is in labor, followed by crowning, and delivery. Extra care and help are needed if there are any complications in childbirth and pregnancy.

Chapter Review: Normal Childbirth

- EMT's role in normal childbirth
- Wear PPE
- Get the mother into a comfortable position
- Provide emotional support
- Prepare the OB kit
- Get into the right position to hold and support the baby as it comes out
- Assess the airway and use a syringe when needed
- Note the time of birth



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In this third lesson, we talk about the EMT's role in normal childbirth.
The primary role of an EMT is to determine whether the delivery will occur on the scene and if so, to assist the mother as she delivers her child. For this, wear the right personal protection equipment and help the mother to lay down in a comfortable position, and ensure that there is no clothing or obstruction in the vaginal area.
Next, prepare the OB kit that includes everything that the mother and the newborn would need during and just after delivery. With all this in place, get ready for the delivery. Provide emotional support for the mother and communicate with her through contractions.
Ensure that someone is holding the mother's head as she delivers while another person must be positioned to hold the baby's head as it emerges out. It's always a good idea to keep one hand at the bottom and the other at the top, to gently help the baby as it comes out.
Once the baby is delivered, check its airway, and use a syringe to suction out from its nose and mouth if needed. Finally, note the time of birth.

Chapter Review: Caring For Neonate And Mother Post-Delivery

- Check the APGAR score
- Cut the umbilical cord. Know the circumstances when it should be cut during delivery
- Swaddle and keep the neonate warm
- Get ready for neonatal resuscitation if needed
- Provide care for the mother



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In this lesson, we will talk about caring for the neonate and mother post-delivery. As soon as the baby is born, check the APGAR score, where you assess the baby's appearance, pulse, grimace, activity, and respiratory effort. If the score is 7 and above, the baby is in good health while a score of 3 or less means the baby requires immediate critical care.

Next, cut the umbilical cord using sterile clamps and scissors. Understand the circumstances that necessitate you to cut the cord during or immediately after delivery. Finally, swaddle the infant to keep it warm and then, get ready for neonatal resuscitation in case of complications during pregnancy or delivery. Assess the heart rate and provide artificial ventilators if the beats per minute are less than 100. If it goes below 60, start chest compressions at the rate of 120 beats per minute.

At the same time, care for the mother as there is a chance for serious bleeding or infection. Make sure the placenta is delivered as well. Keep the mother comfortable and encourage her to nurse.

Chapter Review: Childbirth Complications

- Abnormal presentation
- Prolapsed umbilical cord
- Shoulder Dystocia
- Nuchal cord
- Unbroken amniotic sac
- Premature babies
- Meconium staining
- Stillbirth



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Next, we will look at the possible childbirth complications that could make a vaginal delivery a difficult one.
The first complication is the abnormal presentation of the baby. If the baby is in a breech or a limb position, its buttocks or legs can come first. Since this can injure the baby, a cesarean delivery is preferred. Both of these presentations require hospitalization. Also, if the mother is carrying more than one baby, it can lead to complications, so that's something to watch out for.
The next possible complication is the prolapsed umbilical cord that drops through the cervix first and can squeeze the baby, thereby cutting off its oxygen supply in the birth canal.
The next complication we talked about is shoulder dystocia where the baby's shoulders get stuck in the birth canal while the nuchal cord is a condition where the umbilical cord gets wrapped around the baby's neck, leading to possible strangulation.
Next, is the unbroken amniotic sac where the baby is delivered along with the amniotic sac. This is more common in cesarean and premature deliveries. Similarly, premature babies can have low birth weight and may require neonatal medical care.
The final possible complication is meconium staining that can lead to a condition called meconium aspiration syndrome.

Besides these complications, sometimes, the baby can die during delivery. In such cases, provide emotional comfort to the family.

Chapter Review: Complications Of Pregnancy

- Gestational diabetes
- Hypertensive disorder
- Eclampsia
- Supine Hypotensive syndrome
- Ectopic pregnancy
- Abruptio placenta and placenta previa
- Miscarriage and abortion
- Abuse
- Cardia arrest



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There can be many complications during pregnancy and that's what we covered in this lesson. The first complication is gestational diabetes that may develop during pregnancy and can get back to normal after the delivery. Another complication is a hypertensive disorder that includes preeclampsia, eclampsia, chronic hypertension, and gestational hypertension. Next, is the more serious and relatively rare condition called eclampsia that is characterized by seizures and may require immediate hospitalization. Another complication is the supine hypotensive syndrome where the uterus

can press the inferior vena cava when a woman is lying in a supine position, thereby reducing the cardiac output by 30 to 40 percent.
Ectopic pregnancy is a complication that occurs in the early stages when the embryo implants itself outside the uterus. Abruptio placenta and placenta previa are other complications that cause vaginal bleeding and could lead to miscarriage. Miscarriage and abortion are the terminations of pregnancy, where the former happens naturally and the latter is induced respectively. Sexual, physical, mental, and substance abuse, and trauma and injuries during pregnancies are the other possible complications. The final complication is cardiac arrest, where CPR has to be done immediately, and everything should be done to save the mother and the child.

Chapter Review: Gynecological Emergencies

- Gynecology and Obstetrics
- Pelvic Inflammatory Disorder
- Sexually Transmitted Diseases
- Bacterial Vaginosis
- Gonorrhea
- Vaginal bleeding
- Abuse
- Primary and secondary assessment
- Cultural considerations



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The last lesson in this chapter is gynecological emergencies. Since there are many gynecological complications, it is divided into two streams. Anything to do with pregnancy and childbirth is obstetrics while the other complications are gynecological ones. It merits to note that most doctors are qualified in both the streams. The first is the Pelvic Inflammatory Disease or P I D in short, which is an infection of the upper organs of the female reproductive system. The second possible complication is Sexually Transmitted Diseases, or S T D in short, where an infection occurs when bacteria, fungi, or viruses are passed when a woman has unprotected vaginal, anal, or oral sex with someone who has S T D. Next we discussed Bacterial Vaginosis, a common vaginal infection that is best treated with antibiotics, including, cream, gel, or medication. Following this, we have Gonorrhea, a S T D that affects both men and women, and is caused by a sexually transmitted bacterium that enters the woman's body, and rapidly grows and multiples in the warm and moist reproductive tract. Then, we talked about vaginal bleeding that is not associated with a period and can be caused due to abnormal menstruation, vaginal trauma, ectopic pregnancy, spontaneous abortion, cervical polyps, and cancer. Trauma to external genitalia and sexual abuse have specific treatment principles where you must never remove any evidence of assault in the genitalia unless the

woman is bleeding and requires help. While handling such patients, be sensitive to cultural preferences, size-up the scene, do a primary and secondary assessment, report to the concerned authorities, and reach out to emergency medical care if needed. With this, we come to the end of chapter summaries, and this is followed by a quiz.