

Appendix 3

Bleeding During Pregnancy – An Overview

Many pregnant women experience one or more episodes of vaginal bleeding during their pregnancy. The cervix, the opening of the womb, is very blood rich, similar to your nose. Just like some people experience nosebleeds for no particular reason, some women experience bleeding from the cervix for no particular reason. Intercourse or a vaginal exam may cause a small, insignificant amount of bleeding or spotting. Most of the time, the cause is unknown.

You need to call your midwife if:

- You are healthy with no specific risk factors and have vaginal bleeding amounting to more than a “twonie” (4-5cm in diameter) size on your pad or underwear, the bleeding is not related to prior intercourse or vaginal exam, or you are bleeding and have pain or cramping.
- Your midwife has informed you that you have individual risk factors (e.g. a diagnosed placenta previa) and you have noticed some bleeding on your pad or underwear.

First trimester bleeding

First trimester bleeding is any vaginal bleeding during the first 3 months of pregnancy. Vaginal bleeding may vary from light spotting to severe bleeding with clots. Vaginal bleeding is a relatively common occurrence in early pregnancy, affecting 20-30% of all pregnancies.

Second & Third trimester bleeding

Vaginal bleeding during the second and third trimesters of pregnancy (the last 6 months of a 9-month pregnancy) involves concerns different from bleeding in the first 3 months of your pregnancy. Bleeding during the second and third trimesters amounting to more than a slight amount of spotting following intercourse or vaginal exam is usually abnormal.

Bleeding after the 28th week of pregnancy

Bleeding from the vagina after the 28th week of pregnancy is a true emergency. The bleeding can range from very mild to extremely brisk and may or may not be accompanied by abdominal pain.

Causes of Bleeding in Pregnancy

First trimester bleeding

Postcoital bleeding is vaginal bleeding after sexual intercourse. It may be normal during pregnancy.

Bleeding may also be caused by reasons unrelated to pregnancy. For example, trauma or tears to the vaginal wall may bleed, and some infections may cause bleeding.

Implantation bleeding: There can be a small amount of spotting associated with the normal implantation of the embryo into the uterine wall, called implantation bleeding. This is usually very minimal, but frequently occurs on or about the same day as your period was due. This can be very confusing if you mistake it for a mild period so that you don't realize you are pregnant. This is a normal part of pregnancy and no cause for concern.

Threatened miscarriage: You may be told you have a threatened miscarriage if you are having some bleeding or cramping. The foetus is definitely still inside the uterus (based usually on an exam using ultrasound), but the outcome of your pregnancy is still in question. This may occur if you have an infection, such as a urinary tract infection, if you get dehydrated, if you are involved in physical trauma, if the developing foetus is abnormal in some way, or most often, for no apparent reason at all. It is important for you to know that threatened miscarriages are almost never caused by things you do, such as heavy lifting, having sex, or emotional stress. There is no effective treatment to stop or prevent a threatened miscarriage.

Completed miscarriage: You may have a completed miscarriage (also called a spontaneous abortion) if your bleeding and cramping have slowed down and the uterus appears to be empty based on ultrasound exam. This means you have lost the pregnancy. The causes of this are the same as those for a threatened miscarriage. This is the most common cause of first trimester bleeding. No treatment is needed other than a careful watch for signs of infection and treatment with appropriate antibiotics if an infection develops.

Incomplete miscarriage: You may have an incomplete miscarriage (or a miscarriage in progress) if the pelvic exam shows your cervix is open and you are still passing blood, clots, or tissue. The cervix should not remain open for very long. If it does, it indicates the miscarriage is not completed. This may occur if the uterus begins to clamp down before all the tissue has passed, or if there is infection.

Depending on the circumstances, you may choose to await spontaneous completion of the miscarriage or a medical or surgical completion. The first two options are only appropriate for women who are not experiencing excess bleeding or signs of infection and have appropriate support from their caregivers. A medical completion involves the use of oral or vaginal medication, which will assist your body to complete the miscarriage through initiation of uterine contractions to expel the uterine contents. Oral pain medication and/or preventative use of antibiotics may be offered, and the procedure can take place at home.

Surgical completion of the miscarriage involves admission to hospital and a dilation and curettage of the uterus ("D&C") usually under general anaesthetic. This will be recommended for women experiencing excess bleeding or signs of infection.

Blighted ovum: You may have a blighted ovum (also called embryonic failure). An ultrasound would show evidence of an intrauterine pregnancy, but the embryo has failed to develop, as it should in the proper location. This may occur if the foetus is abnormal in some way; it does not result from anything you did or didn't do.

Intrauterine foetal demise: You may have an intrauterine foetal demise (also called IUFD, missed abortion, or embryonic demise) if the developing baby dies inside the uterus. This diagnosis would be based on ultrasound results and can occur at any time during pregnancy. This may occur for any of the same reasons a threatened miscarriage occurs during the early stages of pregnancy. It is very uncommon for this to occur during the second and third trimesters of pregnancy. If it does, the causes also include separation of the placenta from the uterine wall (called placental abruption) or because the placenta didn't get sufficient blood flow. Options for care will be determined in consultation with an obstetrician

Ectopic pregnancy: You may have an ectopic pregnancy (also called tubal pregnancy). This is diagnosed based on your medical history and ultrasound, and in some cases laboratory results. Bleeding from an ectopic pregnancy is the most dangerous cause of first trimester bleeding. An ectopic pregnancy occurs when the fertilized egg implants outside of the uterus, most often in the fallopian tube. As the fertilized egg grows, it can rupture the fallopian tube and cause life-threatening bleeding. Most cases of ectopic pregnancy are treated surgically and you will be referred to an obstetrician for care.

Symptoms of an ectopic pregnancy are often variable and may include pain, bleeding, or light-headedness. Most ectopic pregnancies will cause pain before the tenth week of pregnancy. The foetus is not going to develop and will die because of lack of supply of nutrients. This condition occurs in about 3% of all pregnancies.

There are risk factors for ectopic pregnancy. These include a history of prior ectopic pregnancy, history of pelvic inflammatory disease, history of fallopian tube surgery or ligation, history of infertility for more than 2 years, having an IUD (birth control device placed in the uterus) in place, smoking, or frequent (daily) douching. However, only about 50% of women who have an ectopic pregnancy have any risk factors.

Molar pregnancy: You may have a molar pregnancy (technically called gestational trophoblastic disease). Your ultrasound results may show the developing foetus is not actually a baby but is abnormal tissue. This is actually a type of cancer that occurs as a result of the hormones of pregnancy and is usually not life threatening to you. However, in rare cases the abnormal tissue is cancerous. It can invade the uterine wall and spread throughout the body. The cause of this is generally unknown.

Late-pregnancy bleeding

Problems with the placenta are the most common cause of late-pregnancy. Some bleeding can also be caused by an abnormal cervix or vagina.

Placenta previa: The placenta, which is a structure that connects the baby to the wall of your womb, can partially or completely cover the opening of your womb. When you bleed because of this, it is called placenta previa. Late in pregnancy, as the opening of your womb, called the cervix, thins and dilates (widens) in preparation for labour, some blood vessels of the placenta may stretch and painless bleeding can occur.

Placenta previa causes about 20% of third-trimester bleeding and happens in about 1 in 200 pregnancies.

About 50% of women with placenta previa will also have preterm labour. Painless vaginal bleeding can be the first sign that this is starting to happen.

Risk factors for placenta previa include: Multiple pregnancies, prior placenta previa, prior Caesarean delivery

Placental abruption: This condition occurs when a normal placenta separates from the wall of the womb (uterus) prematurely and blood collects between the placenta and the uterus. Such separation occurs in 1 in 200 of all pregnancies. The cause is unknown.

Risk factors for placental abruption include:

- High blood pressure (140/90 or greater)
- Trauma (usually a car accident or physical assault)
- Cocaine use
- Tobacco use
- Abruption in prior pregnancies (you have a 10% risk it will happen again)

Uterine rupture: This is an abnormal splitting open of the uterus, causing the baby to be partially or completely expelled into the abdomen. Uterine rupture is very rare but dangerous for both mother and baby.

About 40% of women who have uterine rupture have had prior surgery of their uterus, including Caesarean delivery. The rupture may occur before or during labour or at the time of delivery. For women with prior caesarean section the risk of uterine rupture in labour is about 0.5 percent (1 out of 200). Most uterine ruptures in labour occur during induced labours.

Other risk factors for uterine rupture include:

- Trauma
- Excessive use of oxytocin (Pitocin), a medicine that helps strengthen contractions
- A baby in any position other than head down
- Having the baby's shoulder get caught on the pubic bone during labour
- Certain types of forceps deliveries

Foetal vessel rupture: This very rare condition occurs in about 1 of every 1,000 pregnancies. The baby's blood vessels from the umbilical cord may attach to the membranes instead of the placenta. The baby's blood vessels pass over the entrance to the birth canal. This is called vasa previa and occurs in 1 in 5,000 pregnancies. Most caregivers will never see a case of vasa previa in their entire career.

Less common causes of late-pregnancy bleeding include injuries or lesions of the cervix and vagina, including polyps, cancer, and varicose veins.

Inherited bleeding problems, such as haemophilia, are very rare, occurring in 1 in 10,000 women. If you have one of these conditions, such as von Willebrand disease, tell your midwife.
