

## Bleeding in Pregnancy

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### First Trimester

Bleeding is the most common complication of the first trimester of pregnancy.<sup>1</sup> One-third to one-half of women who experience bleeding in the first trimester lose the baby.<sup>2</sup>

It is important to note how often you are bleeding, what color the blood is, how long it lasts, how often you are changing your pad, or if it occurs after any specific activity. Women who have bleeding towards the end of the first trimester are less likely to lose the baby<sup>1</sup> and bleeding occurring after fetal cardiac activity is confirmed lowers the risk of loss to less than 6%.<sup>1</sup>

The most common causes of bleeding in the first trimester are:

- Implantation bleeding
- Subchorionic hemorrhage
- lesions of the cervix
- Vaginal infection
- Miscarriage

### Diagnosis

To investigate the cause of the bleeding, a physical exam is necessary. Bleeding from the cervix must first be ruled out. The cervix has increased vasculature during pregnancy. Gonorrhea, chlamydia, and trichomoniasis can all cause cervical bleeding<sup>1</sup>. Cervical polyps can also cause bleeding during pregnancy. If you are bleeding from the cervix, pelvic rest is indicated for about a week after the bleeding stops.

Once cervical bleeding is ruled out, evaluation for uterine bleeding is carried out mainly through ultrasound. Transvaginal ultrasound can be used to identify an extra-uterine pregnancy (ectopic pregnancy). Abdominal ultrasound will be useful in finding fetal cardiac activity, uterine fibroids, or diagnosing subchorionic bleeding (bleeding form behind the placenta).

Lab work can be done for serial beta-hCG levels to determine the viability of the pregnancy. Normally, hCG levels double about every 48 hours through the 7<sup>th</sup> week<sup>1</sup>. If blood level is 1500 mIU/mL a gestational sac should be visible on ultrasound.

Progesterone levels can also be monitored through lab work. Progesterone is necessary for pregnancy to continue and normal lab values will be 20ng/mL<sup>1</sup>. Values below 5 ng/mL is considered indicative of a failing pregnancy.

### Management

Bleeding with a positive pregnancy test and no visualization of an intrauterine pregnancy may indicate ectopic pregnancy and medical care is necessary to rule this out. Bleeding from ectopic pregnancy is the most serious cause of bleeding in the first trimester<sup>2</sup>.

Medical care should be sought if you are soaking more than 2 pads per hour for more than 2 hours or have any symptoms of infection: fever, elevated pulse, foul smelling discharge.

If miscarriage has been determined, please see Miscarriage Handout.

## Second and Third Trimester Bleeding

After the 24<sup>th</sup> week of pregnancy and before labor begins, heavy bleeding is sometimes referred to as antepartum hemorrhage<sup>3</sup>. Severe causes of this bleeding include:

- Placenta previa (the placenta is implanted either completely over the cervical opening or very close to it) This bleeding occurs prior to 30 weeks and is resolved by 30 weeks 90% of the time<sup>2</sup>. The main symptom is bright red, painless bleeding from the vagina.
- Placental abruption (the placenta has separated from the uterine wall prematurely, either completely or partially) This usually presents with abdominal pain and contractions. Smoker's are at an increased risk of abruption- a rise of 20% for each 10 cigarettes smoked daily<sup>2</sup>.
- Vasa previa (rare vessels running through the amniotic sac are presenting at the cervical opening and have ruptured) This commonly would occur with your water breaking spontaneously.
- Trauma
- Uterine rupture. The risk of uterine rupture with no previous uterine surgery is 1 in 7,440<sup>2</sup>. Symptoms include abdominal pain, signs of shock, and decreased fetal heart rate.

However, the most common cause of light bleeding during this time period is spotting after sex or cervical changes at the end of pregnancy. Lighter, bright red bleeding can also occur with hemorrhoids.

## Diagnosis/Management

Transvaginal ultrasound is the best tool for diagnosing placenta previa.

**Heavy bleeding with abdominal pain requires immediate medical care at the nearest emergency room. Call your midwife on the way.**

## References

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- 1) King, T., Brucker, M., Fahey, J., Kriebs, J., Gegor, C., & Varney, H. (2015). *Varney's midwifery*. (5<sup>th</sup> ed.) Burlington: Jones & Bartlett Publishing.
- 2) La Bleu, J. (2016, October 15). Bleeding in Pregnancy Lecture via Big Blue Button for MDWF 354: Complications of the Prenatal Period, Midwives College of Utah, Salt Lake City, UT.
- 3) Marshall, J., Raynor, M., Fraser, D., & Myles, M. (2014). *Myles Textbook for Midwives*. (16<sup>th</sup> ed.) Edinburgh: Churchill Livingstone.