Menstrual Bleeding and Blood Clots: Diana Health

link to menstruation as a vital sign and other menstruation-related blogs

Your blood is made of several different vital components that have different functions. In addition to the liquid part of the blood, called plasma, blood is made of red and white blood cells, platelets, electrolytes, hormones, nutrients, and waste products. Blood continuously flows throughout our body, but when we get a scrape or a cut, proteins in our blood (clotting factors) activate one another in a cascade that results in a blood clot, allowing the bleeding to stop.

Why do we bleed and sometimes have clots during menstrual cycles?

Between periods, the lining of the uterus grows thicker and thicker in preparation for a potential pregnancy. If a pregnancy does not occur, progesterone levels decline, leading to the tiny blood vessels that supply the lining of the uterus with its blood supply, narrowing. As the blood flow to the endometrium (lining of the uterus) is cut off, the tissue does not get enough oxygen, leading to tissue breakdown and the shedding of the top layer of the endometrium. This, along with uterine muscle contractions (often felt as uterine cramping), helps expel the endometrial tissues. The blood vessels that supply the tissue break down, and blood, endometrial cells, and mucus are all pushed out of the uterus.

Why do we have blood clots?

Blood clotting helps to prevent excessive blood loss from an injured vessel or scrape as the wound heals. Clotting also helps to form a protective temporary barrier as the body repairs the damaged tissue of a wound. Even a superficial injury could result in catastrophic blood loss without blood clotting.

Where do blood clots form?

Blood may pool in the uterus or vagina and form a clot before coming out of the body. Clots may be very small or the size of a marble or a quarter. Blood clots can contain just blood cells or some of the tissue from the uterus lining. They are often indistinguishable.

What determines the color of the blood?

If the blood has been recently shed, it will likely be bright red, but if the blood has been in the uterus or vagina longer, it may be dark red to brown. There may even be color variation, with some blood being older than others or containing more endometrial tissue.

What causes variation in clotting between women, between periods, or sometimes, even from hour to hour?

Changes in hormone levels, estrogen, and progesterone, impact how thick the uterus's lining gets and when it sloughs off. If the lining gets very thick, when it sloughs off, there will be more tissue, bleeding, and likely blood clots. If the lining is very thin, there will likely be lighter bleeding.

Uterine fibroids, benign (non-cancerous) growths in the uterus's muscle, can result in heavier bleeding and, therefore, more blood clots. They may also change the inside of the uterus, allowing more blood to pool in the uterus and more blood clots to form before being expelled out of the body.

If a woman miscarries, even if they are very early in their pregnancy, they may have more bleeding and blood clots than usual.

Do all women clot the same amount?

Most women clot a "normal" amount; however, there are some women with clotting disorders whose blood does not clot as easily as usual. In these cases, they may have more excessive bleeding with menstrual periods.

Other women may also clot more than usual due to hormonal or genetic changes. This can result in being more predisposed to blood clots, even when a clot is not helpful. For example, they may develop blood clots in blood vessels, blocking blood flow to part of the body. These people are followed by a medical professional and may even be put on medications to decrease how easily their blood clots.

When should I be worried?

The amount of menstrual bleeding varies widely between women, between cycles, and sometimes even between days of a cycle. Some clotting is normal during a menstrual period.

When should I call my Diana Healthcare Professional or other healthcare provider?

if you are passing large clots (for example, larger than a nickel but smaller than a quarter) or are bleeding so much that you are soaking through one or more sanitary pads or tampons every hour for 3 consecutive hours, you should seek care. Also, if bleeding lasts more than 7 days, comes very often (fewer than every 21 days), or far apart (over 35 days from the start of one period to the next), you should reach out for an evaluation. If you have spotting or bleeding between periods or unpredictable cycle lengths, this is another reason that you should connect with a health provider. If your menstrual cramping negatively impacts your daily activities or you notice a change in your menstrual pattern, you should also let your health professional know.

When should I go to the nearest emergency department?

If you are having extremely heavy bleeding

If you are soaking through multiple tampons or sanitary pads in an hour for more than an hour in a row, passing very large clots (larger than a quarter or the size of a golf ball), or if you're having severe abdominal or pelvic pain accompanied by heavy bleeding, you should go to the emergency department. Also, if you have extreme fatigue, are pale, have a rapid heartbeat, feel faint, dizzy, lightheaded, or are short of breath, you should also go to an emergency department. Any bleeding during pregnancy should also be evaluated by a health professional.

Now that you better understand what causes menstrual bleeding, including blood clots, and when to not worry vs. when to seek care, hopefully, you'll feel better equipped to take charge of your health. Knowledge is power, and at Diana Health, we are here to support you with education and empower you to make the changes that are best for you and your body.