

The 7-2-1 Episode 2

Dr Durant: Welcome to the second installment of our podcast series – “7/2/1-All that you need to know about periods”. I am Nefertiti Harmon Durant an Adolescent Medicine physician in the Female Adolescent Bleeding Clinic Division in the Department of Pediatrics at the University of Alabama at Birmingham and a proud member of the Foundation for Women and Girls with Blood Disorders (or FWGBD).

I have the pleasure of introducing my wonderful colleague and co-host– Dr. Sweta Gupta, Pediatric Hematologist at the Indiana Hemophilia and Thrombosis Center at Indianapolis and a member of the Foundation for Women and Girls with Blood Disorders’ Medical Advisory Committee. We both share a common passion for taking care of young girls with heavy menstrual bleeding.

Dr Gupta: It’s great to be back Dr. Durant. To recap in our first podcast, we helped our listeners differentiate between normal vs. heavy menstrual bleeding and learned the signs of bleeding disorders.

Dr Durant: Correct Dr. Gupta – In this podcast and the next Podcast we will talk about Demystifying IUD’s – or intra uterine devices. I am so pleased that we are joined by our fellow FWGBD member – Dr. Patricia Huguelet.

Dr. Huguelet is an Associate Professor and Chief of Pediatric and Adolescent Gynecology at Children’s Hospital Colorado. She is the Pediatric and Adolescent Gynecology Fellowship Program Director at Children’s Hospital Colorado. She is also my Co-Chair of the Education and Advocacy Subcommittee of Foundation’s WGBD LAN. Welcome Dr. Huguelet. Thank you for joining us today.

Well without further ado – let us begin

Dr. Durant: What are the options for IUDs to treat heavy menstrual bleeding?

Dr. Huguelet: Both hormonal and non-hormonal IUDs exist. To effectively

treat heavy menstrual bleeding, a patient needs the hormonal effect of progestin to induce endometrial atrophy and reduce menstrual flow. Therefore, only the hormonal IUDs are effective for treatment of HMB. Two hormonal IUDs contain 52mg of levonorgestrel - the Mirena and Liletta - and have been specifically studied for the treatment of heavy menstrual bleeding, both in patients with and without bleeding disorders.

The Mirena IUD releases 20 micrograms levonorgestrel per day and the Liletta releases 18.6 micrograms per day. Two other hormonal IUDs contain much lower doses of progesterone and therefore have different durations of use as a contraceptive and are associated with different bleeding patterns. These includes the Kyleena, which contains 19.5mg of levonorgestrel and releases 19.5mcg per day and the Sklya which contains 13.5mg of levonorgestrel and releases 14 micrograms per day. All have a similar mechanism of action in preventing pregnancy through profound change in the amount and viscosity of cervical mucus.

Dr. Gupta: What can most patients expect from the IUD with regards to change in menstrual bleeding? How likely is it that their bleeding will stop and if not, will they still have a regular period?

Dr. Huguelet: Most patients using one of the levonorgestrel-containing IUDs will experience a decrease in menstrual bleeding that will lead to lighter bleeding, spotting or amenorrhea. Initially, for the first 3-6 months, bleeding may become irregular, and the number of bleeding days may increase. However, over time the endometrium stabilizes, and bleeding generally lightens and often stops. Lower dose devices have lower rates of amenorrhea and may have higher rates of unscheduled bleeding. Although all methods can theoretically be used to treat heavy menstrual bleeding, scientific literature assessing the use of the levonorgestrel IUD for management of heavy menstrual bleeding only exists for the higher dose 52mg IUDs.

Dr. Gupta: Is the change in bleeding similar for patients with a bleeding disorder?

Dr. Huguelet: Yes! In fact, the 52mg levonorgestrel IUD has been shown to stop periods completely or induce only rare spotting in 40 - 60% of

adolescent and adult women with heavy menstrual bleeding due to a bleeding disorder. Further, most patients report decrease in flooding accidents, passage of blood clots, number of bleeding days and pain with menstrual flow.

Dr. Durant: How do you manage breakthrough bleeding in the setting of an IUD? (Can you comment on the use of combined oral contraception vs estrogen alone? Is there any role for tranexamic acid)

Dr. Huguelet: Evidence does demonstrate that a short course of non-steroidal anti-inflammatory medications for 5-7 days. However, given that NSAIDs can affect platelet function, this medication should be used in consultation with the patient's hematologist. Gynecologists will also sometimes prescribe combined oral contraceptive pills to help stabilize endometrial bleeding, but there is no high-level scientific evidence that this practice works. If breakthrough bleeding persists, evaluating the location of the IUD with a pelvic ultrasound may be warranted as this may occur with a low-lying IUD and improvement in breakthrough bleeding has been demonstrated with replacement of the IUD to the correct, fundal location.

Dr. Durant: How long is the IUD effective and is it safe for adolescents? When should it be removed?

Dr. Huguelet: Current data support the efficacy of the Mirena IUD as a contraceptive for up to 7 years. The Liletta IUD is FDA approved for 6 years, the Kyleena for 5 years and the Skyla for 3 years. IUDs are safe and effective options for adolescents, can be routinely offered to teens, and are in fact encouraged by both the American College of Obstetricians and Gynecologists and the American Academy of Pediatrics given their varied benefits and minimal risks. IUD insertion has not been shown to be more difficult in adolescents compared to adults. In fact, in a study of almost 1,200 adolescents and young adults, ages 13-24, successful IUD placement was achieved on first attempt in 96% of patients. There is no data suggesting higher dissatisfaction rates or complication rates with use of the IUD in teens.

Dr. Gupta: What complications are associated with having an IUD?

Dr. Huguelet: Complications are thankfully uncommon and include contraceptive failure, pelvic infection, IUD perforation and IUD expulsion. Pelvic infection occurs in up to 1% of patients in the absence of active cervical infection. IUD perforation is rare, occurring in 0.1% of cases.

Dr. Durant: How common is an IUD expulsion and is it different for patients with and without a bleeding disorder?

Dr. Huguelet: IUD expulsions occur in about 2-10% of all patients and may be as high as 20% in adolescents, with no difference by IUD type. There is some data to suggest that IUD expulsion rates are higher in the setting of heavy menstrual bleeding and blood disorders, although the evidence is mixed with some studies showing no increased rate and some demonstrating a rate as high as 25%.

Dr. Gupta: Do physicians recommend different techniques or supplemental medications at the time of IUD placement in patients with a bleeding disorder?

Dr. Huguelet: There has not been a demonstrated increased risk of bleeding at the time of IUD insertion in patients with a bleeding disorder. However, given limited scientific studies in this area and some evidence of increased risk of IUD expulsion in the setting of heavy withdrawal bleeding after IUD placement, many providers will consider additional hemostatic agents during and after IUD placement. Treatment should be individualized and occur in consultation with a patient's hematologist.

Dr. Gupta: Thank you very much for this wonderful information.

Please come back for our next episode of the 7-2-1 where we will continue to demystify the use of IUDs.

For more information on heavy menstrual bleeding, please visit the FWGBD website (fwgbd.org).