

## **IUD: Safe, More Comfortable with Ultrasound Guidance**

An intrauterine device (IUD) is a T-shaped medical device that can be inserted into the uterus to provide contraception or to reduce/eliminate menstrual flow. IUDs have been in use for decades, and have proven to be very convenient, safe, and effective method of birth control, as well as a way to manage heavy periods. At Women's Wellness Center, we utilize ultrasound technology during IUD insertion to ensure the device is safely and properly positioned. This technique often reduces discomfort of IUD insertion, as the IUD can be observed in relation to the cervical canal and uterine cavity.

### **Two Categories of IUD are Currently Available:**

#### **1. The Progestin Releasing IUD (Liletta, Mirena, Kyleena) for Contraception and/or Reducing Menstrual Flow.**

These IUDs contain a progestin (progesterone-like hormone) called levonorgestrel, which is continuously released into the endometrial cavity from the IUD. This type of IUD works by thickening the mucus plug in the cervix (the entrance to the uterus), thus blocking sperm entry and preventing conception. These devices are FDA approved to provide contraception for up to 8 years (5 years in the case of Kyleena).

Because the progestin releasing IUD releases a low continuous dose of a progestin into the uterus, it can decrease menstrual flow and improve some other conditions that typically cause excessive bleeding or uterine pain such as endometriosis, adenomyosis, fibroids, or endometrial hyperplasia. The progestin releasing IUD can serve as both a treatment for menstrual issues and an effective birth control option. It can even be used to provide intrauterine progestin in conjunction with systemic estrogen therapy after menopause.

#### **2. The Copper Containing IUD: Paragard (Copper T 380A) for Contraception Only.**

This IUD contains copper, which is released locally into the endometrial cavity. Copper ions from the Paragard IUD alter the cervical mucus and create a toxic environment for sperm, thus preventing conception. Paragard is FDA approved for 10 years for contraception.

### **Effectiveness for Contraception**

The IUD is actually more effective than tubal sterilization in preventing pregnancy, with the progestin IUD being superior to the copper IUD. The reported failure rate of the progestin releasing IUD is 0.1% to 0.7% (1-7 per 1000), for Paragard, 0.6% to 0.8% (6-8 per 1000). Fertility returns immediately after removal of the device.

### **What are Side Effects and Risks?**

Side effects associated with an IUD may include transient cramping and/or irregular spotting. Over time, the progestin releasing IUD typically reduces menstrual flow significantly; often to the point of eliminating flow entirely – a welcome “side effect”, and often the reason for choosing this device. The progestin IUD is considered to have only local (uterine) effects, and the amount of progestin reaching the general circulation is

negligible. Thus, hormonal side effects should not occur. Paragard (copper) IUD will not reduce menstrual flow but may *increase* menstrual flow.

Adverse events associated with an IUD are uncommon, and include expulsion of the IUD through the cervix, and very rarely, uterine infection. With blind IUD insertion, uterine perforation would be a small risk. However, with ultrasound guidance provided in our facility, the device is carefully observed during and after insertion into the uterine cavity, so accurate placement is assured, and uterine perforation is not an issue.

### **How Should I Prepare for IUD Insertion?**

Take a medication for cramping, Ibuprofen 800 mg about 1.5 to 2 hours before you arrive for your appointment. For women who have never given birth by vaginal delivery, an IUD can be placed most easily during the second half of your menstrual period or within 2 days after your period ends. For women who have had at least one vaginal birth, the IUD can be placed at any time during the month.

### **What Should I Expect at My Appointment for IUD Insertion?**

The process of having an IUD inserted typically takes about 5 minutes. The device is placed using a special applicator introduced through the cervix into the uterus. During the procedure, most women feel some cramping, which can be reduced by taking ibuprofen before the procedure. After insertion, a string at the end of the IUD will extend through the cervix but should not bother you or your partner. Patients who have an IUD insertion in our facility will undergo a pelvic ultrasound, thus assuring correct placement of the IUD within the uterine cavity. Using ultrasound guidance also improves the experience for the patient, because instead of poking around to “feel” the IUD’s location, the provider is able to actually see the device within the uterus, thus the entire process goes more smoothly. The IUD takes 4 weeks to become effective, so it is important to use a second method of contraception (condoms, birth control pills, etc.) for 4 weeks after having the IUD placed.

### **What Should I Expect AFTER an IUD Insertion?**

During the first 3 to 6 months after insertion of a progestin releasing IUD, irregular light bleeding may occur as the body adjusts to the device. After 6 months of use, approximately 50% of women have only very light spotting, an average of about three days per month. A large percentage of women cease having periods after one year of use.

In contrast, Paragard copper IUD commonly will cause heavier bleeding with the menstrual period, thus most well informed patients prefer the progestin IUD.