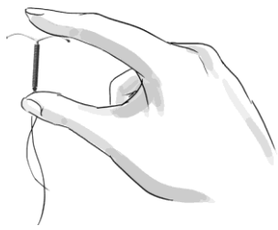
THE INTRAUTERINE SYSTEM

WHAT IS THE INTRAUTERINE SYSTEM (IUS)?



- The IUS is an intrauterine device that contains levonorgestrel (LNG), which is released into the uterus.
- The IUS consists of a plastic T-shaped frame. The stem of the T has a tiny reservoir that contains 52 mg of the progesterone hormone LNG.
- Once the IUS is fitted, approximately 20 µg of LNG is delivered to the lining of the uterus daily over a five-year period.
- The IUS is used for contraception and for the management of heavy or prolonged menstrual periods with no known cause (idiopathic menorrhagia).

HOW EFFECTIVE IS THE IUS?

The IUS is 99.9% effective with perfect and typical use. It is thus highly effective and long lasting. From the first to the fifth year of IUS use, less than 1 pregnancy per 100 women using an LNG–IUS is reported.

WHAT ARE THE ADVANTAGES OF USING THE IUS?

- Provides long-term effect (five years)
- Reduces menstrual bleeding and decreases pain
- Decreases blood loss and thus protects against iron-deficiency anemia
- Menstruation and fertility return one month after IUS removal
- Reduces risk of pelvic infection
- Reduces the symptoms (e.g., pelvic pain, irregular bleeding) of endometriosis

WHAT ARE THE DISADVANTAGES OF USING THE IUS?

- Needs to be inserted by a trained provider
- Poses high risk of ectopic pregnancy when it fails
- More expensive than copper IUD

HOW DOES THE IUS WORK?

In addition to the effects of IUD in general, the use of the IUS has the following results:

- Increases the thickness of the cervical mucus and hinders the passage of the sperm into the uterus
- Prevents the release of an egg from the ovary (ovulation), but this prevention does not necessarily occur in all women who use the IUS

WHEN IS THE IUS INSERTED?

- Usually within the week of beginning a period
- Six weeks after delivery
- Immediately after an abortion or miscarriage if no infection exists
- Any time, provided that the client is certainly not pregnant

WHO CAN USE THE IUS?

The IUS is appropriate for women who

- Want a long-acting, effective, reversible contraceptive method
- Are breastfeeding
- Show change in risk status while using another method (e.g., estrogen- containing methods)
- Do not want more children but are not ready to undergo surgical sterilization Table 15 shows the

MEC for IUS.

Table 15. MEC categories for IUS

Category 1: Use the method without restriction.

- Women more than 20 years old
- Women who have given birth
- Any time for non-breastfeeding postpartum women
- More than 4 weeks after childbirth
- Post-abortion in the first trimester
- Past ectopic pregnancy
- History of pelvic surgery
- Women who smoke at any age
- Body mass index of more than or equal to 30 kg/m2
- Schistosomiasis
- Have increased blood pressure (systolic of 140 mm Hg to 159 mm Hg or diastolic of 90 mm Hg to 99 mm Hg)
- History of high blood pressure during pregnancy
- Family history of DVT/PE
- Surgery without immobilization
- Superficial venous thrombosis
- Uncomplicated valvular heart disease
- Non-migrainous headache
- Anemias such as thalassemia, sickle cell disease, or iron-deficiency anemia
- Depressive disorders
- Women with irregular but not heavy vaginal bleeding
- Initiation in women with heavy or prolonged bleeding
- Diagnosed with benign ovarian tumor, endometriosis, severe dysmenorrhea
- Cervical ectropion
- Benign breast disease or family history of cancer
- History of gestational diabetes
- Non-pelvic tuberculosis
- Adequately controlled hypertension, in which blood pressure CAN be evaluated
- Malaria
- History of PID and with subsequent pregnancy
- Uterine fibroids that do not distort the uterine anatomy
- Any thyroid disorders
- History of pregnancy-related cholestasis
- Any classification of viral hepatitis
- Mild liver cirrhosis
- Epilepsy
- Current intake of any anticonvulsant or antimicrobial

Category 2: Generally use the method but with more than usual follow-up.

- Menarche to 20 years old
- Women who have not given birth
- Have high blood pressure (systolic of more than or equal to 160 mm Hg or diastolic of more than or equal to 100 mm Hg)
- History of hypertension, in which blood pressure CANNOT be evaluated
- Undiagnosed breast mass
- High risk of HIV
- Among women with anatomical abnormalities that interfere with IUD insertion (e.g., cervical laceration or stenosis)
- Initiation of the method in women with past PID and no subsequent pregnancy

- Post-abortion in the second trimester
- Continued use in women with increased risk of STIs
- History or current DVT/PE on anticoagulant therapy
- Major surgery with prolonged immobilization
- Current and history of ischemic heart disease, stroke, or hyperlipidemia
- Hypertension with vascular disease
- Other STIs (excluding gonorrhea, chlamydial, and HIV) and vaginitis
- Continued use in women with endometrial cancer or ovarian cancer
- Initiation of the method in women who are HIV-infected
- Women with AIDS but on anti-retroviral therapy

- Known thrombogenic mutations
- Complicated valvular heart disease
- Currently on anti-retroviral therapy
- Diabetes, with or without vascular disease

- Use of any antiretroviral therapy
- Migraine without aura
- Continued use in women with heavy or prolonged vaginal bleeding
- Women diagnosed with cervical intraepithelial neoplasia
- Any gall bladder disease
- History of cholestasis related to COC use
- Benign liver tumors such as focal nodular hyperplasia
- Continued use in women with cervical cancer prior to treatment

- Women diagnosed with systemic lupus erythematosus and on immunosuppressive treatment or with severe thrombocytopenia

WHO CANNOT USE THE IUS?

Category 3: Do not use the method unless no other appropriate method is available under close supervision.

- Undiagnosed breast mass
- Continued use in women with endometrial cancer or ovarian cancer
- Among women with anatomical abnormalities that interfere with IUD insertion (e.g., cervical laceration or stenosis)
- Initiation of the method in women with past PID and no subsequent pregnancy
- Continued use in women with increased risk of STIs
- Other STIs (excluding gonorrhea, chlamydial, and HIV) and vaginitis
- High risk of HIV
- Initiation of the method in women who are HIV-infected
- Women with AIDS but on anti-retroviral therapy
- Currently on anti-retroviral therapy
- Diabetes, with or without vascular disease
- Any gall bladder disease
- History of cholestasis related to COC use
- Benign liver tumors such as focal nodular hyperplasia
- Use of any antiretroviral therapy

Category 4: Do NOT use the method.

- During pregnancy
- Puerperal sepsis
- Immediate post-septic abortion
- Initiation of method in clients with unexplained vaginal bleeding before evaluation
- Women with gestational trophoblastic disease
- Initiation of method in clients with cervical or endometrial cancer
- Diagnosed with breast cancer
- Among women with anatomical abnormalities that distort the uterine cavity (e.g., fibroids)
- Current PID
- Initiation of method in clients with current purulent cervicitis, chlamydial infection, or gonorrhea
- Initiation of method in clients with pelvic tuberculosis

WHAT ARE THE POSSIBLE SIDE EFFECTS OF IUS?

The following are the possible side effects that IUS users may experience:

- Headache
- Nausea
- Acne
- Mood changes
- Weight gain
- Back pain
- Breast tenderness or pain
- Excessive fluid retention in the body tissues, resulting in swelling (edema)
- Development of fluid-filled sacs (cysts) in the ovaries
- Inflammation of the lining of the vagina (vaginitis)
- Changes in menstrual bleeding
- Lower abdominal pain

According to the WHO (74), the risk of uterine perforation or puncturing with IUS insertion using the prescribed instrument is rare. If it does occur, it usually heals without treatment. The risk of miscarriage, preterm birth, and infection when an IUS is in place and the woman becomes pregnant is very rare.

WHAT COUNSELING TIPS SHOULD BE OFFERED TO THE CLIENT?

- Recommend a gynecological examination before IUS insertion, six weeks after insertion, and then yearly (or more frequently if clinically needed).
- The IUS provides effective contraception for five years and must be removed by a doctor after this time. However, inform the client that it can be removed earlier if required or if the patient no longer desires its use.
- Give antibiotics to a client with any heart valve defects when the IUS is inserted or removed to prevent inflammation of the heart valves and the sac surrounding the heart (endocarditis).
- Advise a client who has missed a period of six weeks to consult her doctor to ensure that the IUS has not been expelled and that she is not pregnant. The IUS might have been causing her periods to stop.

WHEN IS IUS REMOVAL RECOMMENDED?

- Recommend the removal of the IUS if the client experiences recurrent pelvic infection or inflammation of the womb lining (endometritis) or if an infection does not respond to treatment within a few days.
- An IUS may be expelled from the uterus without the user noticing it, although an increase in menstrual bleeding or pain may serve as a warning. The effectiveness of the IUS is lost or decreased if it is expelled or partially expelled, respectively.
- Show the client how to check the removal threads on her IUS when it is inserted to make sure that it is still in place. Tell her to consult a doctor if she cannot find the threads.
- Ask the client to consult her doctor if she experiences lower abdominal pain, particularly in combination with missed periods, or a recurrence of menstrual bleeding if her periods had stopped.
- If pregnancy does occur while the IUS is in place, the IUS should be removed.