

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

- **Intra Uterine Device**
- **Presented by:**
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- **Obstetric & gynecological nursing**

Objectives

- By the end of this presentation you will be able to :-
- Define IUDs& implanon
- List the advantage &disadvantaged
- Emirate the side effect &benefit
- Explain the insertion &removal

Intra Uterine Device (IUD)

- **Introduction:**

The intrauterine device (IUD) is the oldest long acting reversible contraceptive (LARC) method .The IUD is a small contraceptive device that is placed inside the uterus.

Types of IUD's:

1. Non-medicated IUD's:

Contraceptive action by producing sterile inflammatory response in Endometrium. These are available in ring shaped IUD's made up of s.s and plastic fabricated form polyethylene, polypropylene.

2. Medicated IUD's:

- Copper IUD's
- Progesterone releasing IUD's

1. Nonmedicated or inert IUDs :

- **First generation IUDs Eg: Lippes Loop :**
They appeared in different shapes and sizes – loops, spirals, coils, rings, and bows.
The lippes loop is the best known and commonly used device in the developing countries.

2. Medicated :

a/ Second generation(IUDs) eg: cooper IUCD.

A new approach was tried in 1970s by adding copper to the IUD. A number of copper devices are now commercially available:

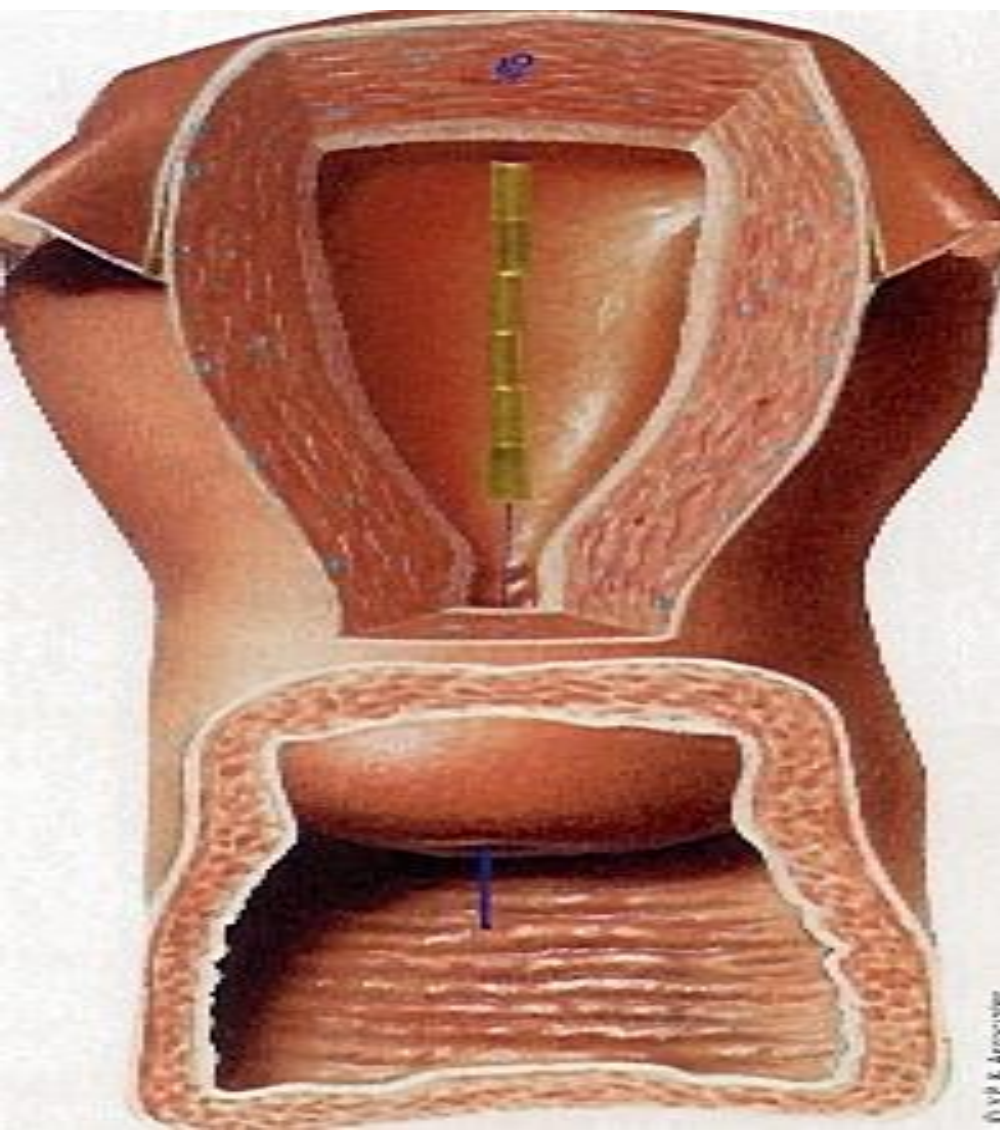
Earlier devices-

Copper -7

Copper T-200

- **The copper T380A(Para Gard)** is highly effective.
- **GyneFix**; frameless device comprising 6 copper sleeves threaded onto a suture, is embedded into the fundal myometrium of the uterus ; this is associated with lower expulsion rate.

- **Copper affect endometrial enzymes, glycogen metabolism; thus rendering the endometrium hostile to implantation .**
- **Once it's in place, it works for up to 10 years.**
- **ParaGard can also be used as a form of emergency birth control after unprotected sex. If the IUD inserted within five days after having unprotected sex it's almost 100% effective in preventing a pregnancy**



GyneFix



Copper T



TCu 380A



TCu 220



TCu 200



MLCu 375



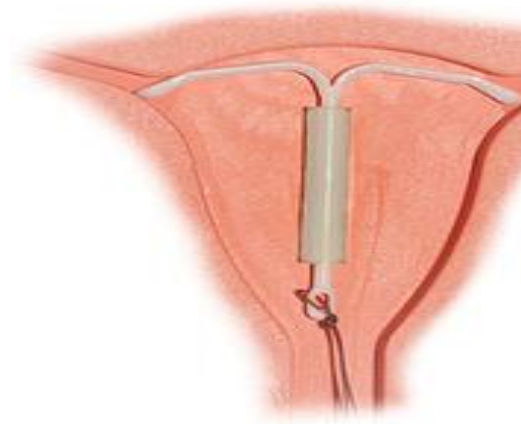
Nova T

Third generation IUDs

- Hormone releasing IUD

Mirena 20(LNG-IUD)

- T shaped hormonal device LNG-20 (Mirena) releasing 20 mcg of levonorgestrel it has a low pregnancy rate (0.2 per 100 women) and less number of ectopic pregnancies.
- Effective for 5 yrs.
- It prevent the ovulation, increase the viscosity of cervical mucous, suppress the growth of endometrium



- **4th generation frameless IUDs:**
- Fibroplant (levonorgestrel) is releasing 14 microg of levonorgestrel/ day.



32 mm / 1.26 in

Hormonal IUD Basics

- **The three brands of hormonal IUDs available are:-**
- **1. Liletta.**
- **2. Skyla.**
- **3. Mirena.**
- **Liletta and Skyla continue to work for up to three yrs.**
- **Mirena can prevent pregnancy for up to five yrs.**

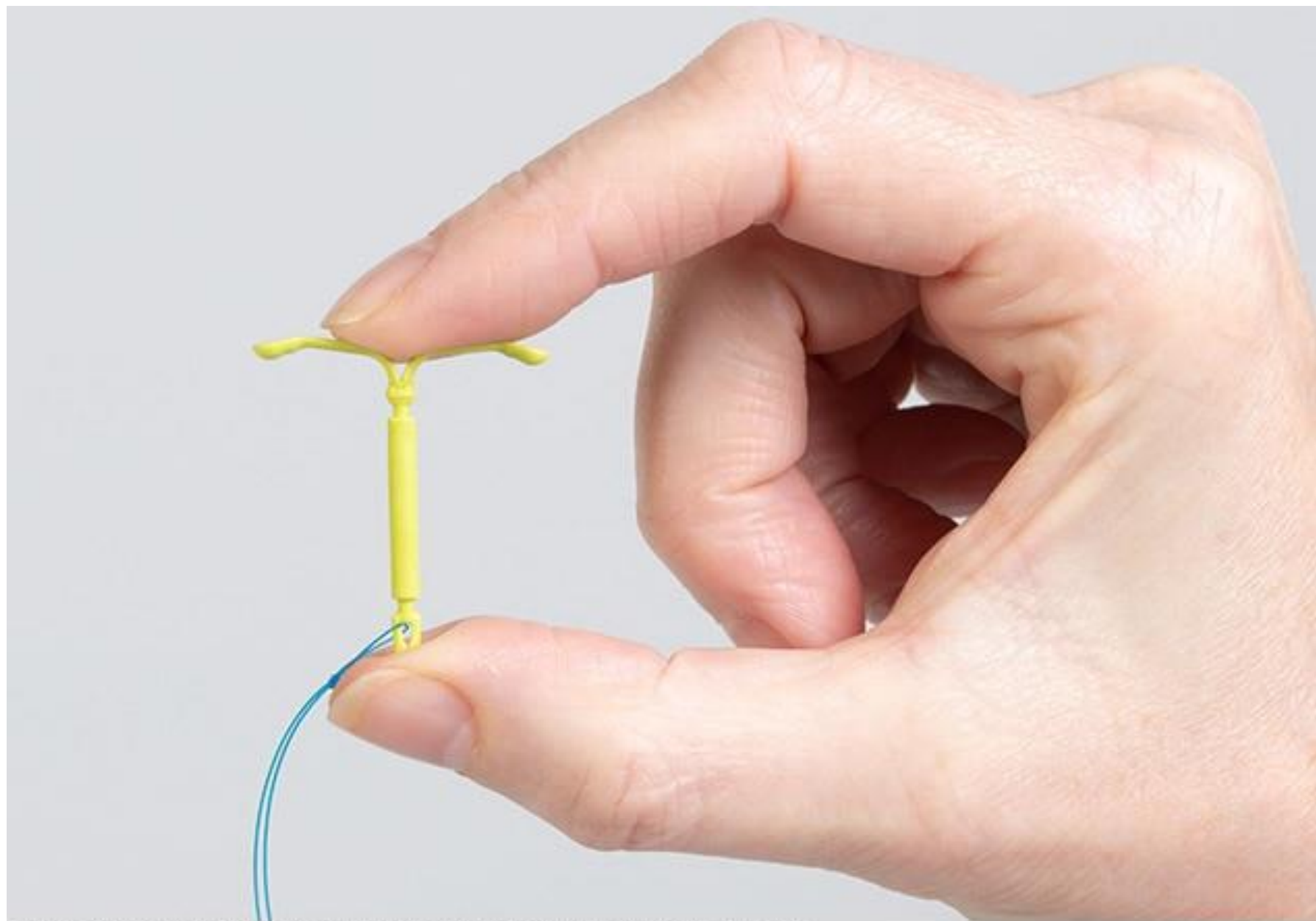
Mirena(hormonal IUD)

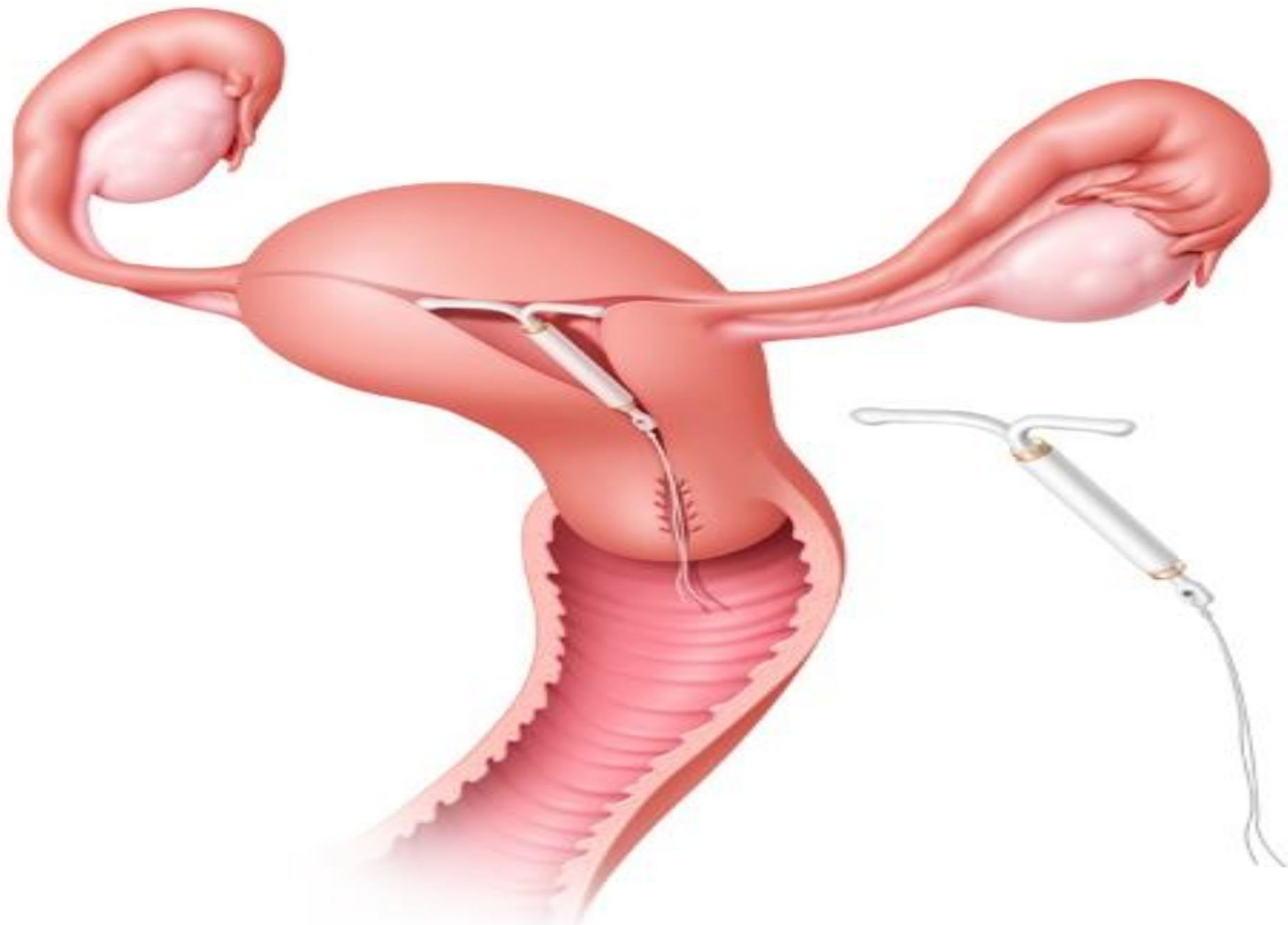
- Mirena is a hormonal intrauterine device (IUD) that can provide long-term birth control.
- The device is a T-shaped plastic frame that's inserted into the uterus, where it releases a type of the hormone progestin.
- **The mode of actions:**
- The hormones thicken the cervical mucus to prevent sperm from swimming to the egg.
- Thin the uterine lining to stop a fertilized egg from implanting.

- **In addition to preventing pregnancies, hormonal IUDs will lighten the periods and reduce cramps. Mirena and Liletta may get rid of the periods entirely.**

side effects

- **breast soreness**
- **breast tenderness**
- **headaches**
- **nausea**
- **mood changes**
- **weight gain**
- **acne**





Advantages

- **Both the copper IUD and the progestogen IUD have the following benefits:**
- **effective long term contraception (at least five years)**
- **easy to maintain, can't forget to use it as the Pill**
- **it is cheaper than other contraception (more expensive at first but cheaper over the long term)**
- **Can try for pregnancy as soon as it is removed.**
- **The progestogen IUD has the added benefit of reducing menstrual bleeding.**

- **Mirena is n't appropriate for everyone. may stop use of Mirena mother have:**
- **Breast cancer.**
- **Uterine or cervical cancer**
- **Liver disease**
- **Uterine abnormalities, such as fibroids.**
- **A pelvic infection or current pelvic inflammatory disease**
- **Unexplained vaginal bleeding**

Disadvantages

- **Both the copper and the progestogen IUD have the following disadvantages:**
- **Expulsion from the uterus, usually during a period. The women should always check the string is in place.**
- **Although rare, when an IUD fails and a woman becomes pregnant, it must be removed as soon as possible. An IUD in a pregnant woman increases the risk of miscarriage.**
- **There is a small risk of infection in the three weeks following insertion.**
- **Because pelvic infections can lead to infertility.**
- **The IUD may perforate the wall of the uterus.**

Side effects associated with Mirena include:

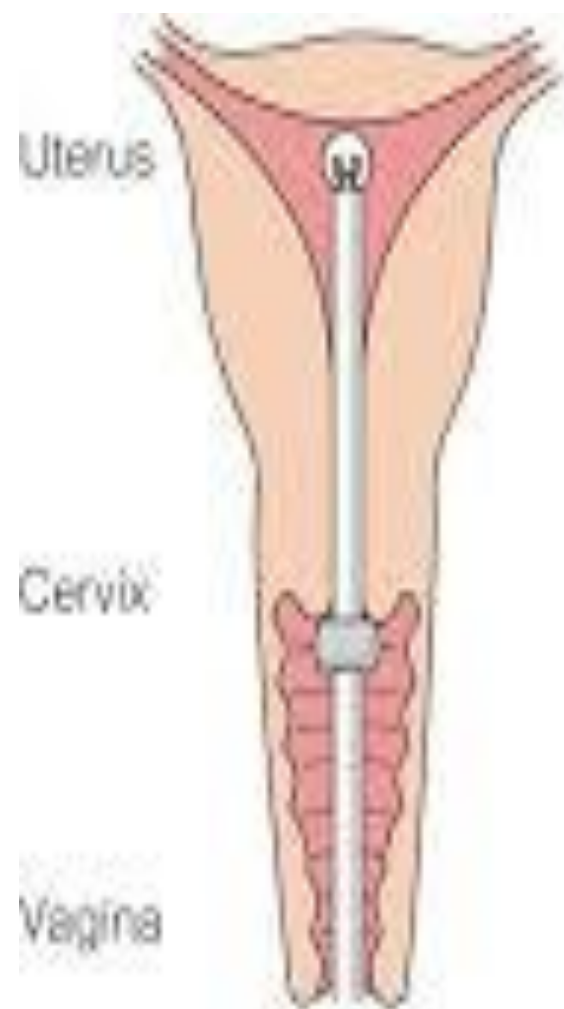
- **Headache**
- **Acne**
- **Breast tenderness**
- **Irregular bleeding, which can improve after six months of use**
- **Mood changes**
- **Cramping or pelvic pain**

Preparation:

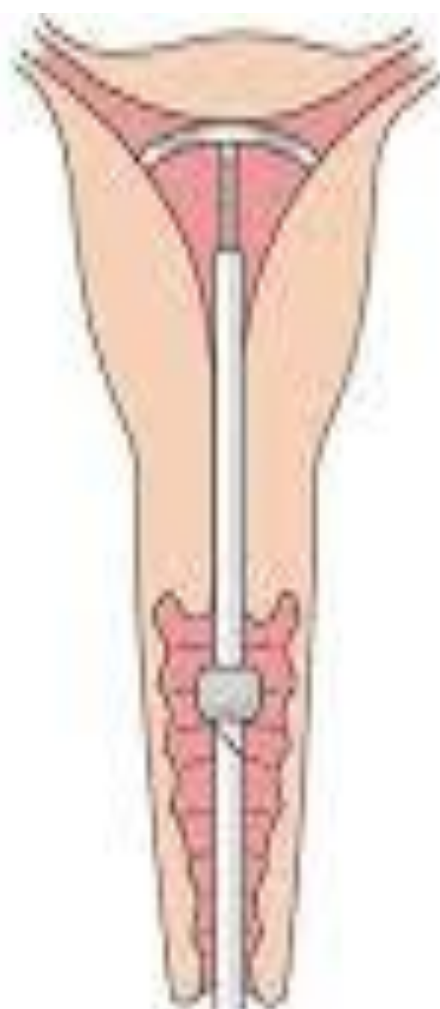
- **Do a pelvic exam before inserting Mirena.**
- **May be screened for STIs.**
- **Take a pregnancy test to confirm the women not pregnant.**

During the procedure

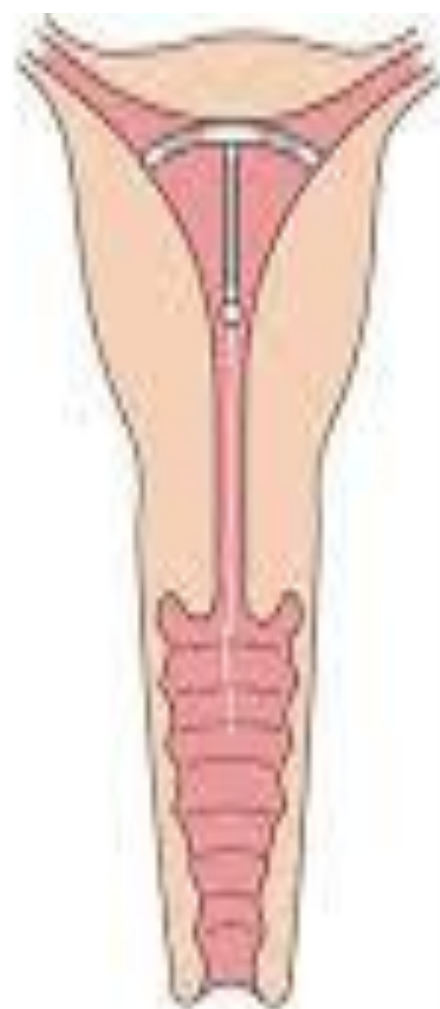
- **Insert a speculum into the vagina and clean vagina and cervix with an antiseptic solution.**
- **Special instruments might be used to measure the depth of the uterine cavity.**
- **place the device inside an applicator tube.**



(a) IUD is inserted through tube into uterus



(b) Tube is removed



(c) IUD in place

- **The tube is inserted into the cervical canal, and Mirena is carefully placed in the uterus. When the applicator tube is removed, Mirena will remain in place.**
- **Mirena's strings don't protrude too far into the vagina, and may record the length of the strings.**
- **During Mirena insertion, may experience cramping, dizziness, fainting or a slower than normal heart rate.**

After the procedure

- **After month, check to feel strings are protruding from the cervix.**
- **check for signs and symptoms of infection.**
Waiting at the clinic for about 15 minutes to ensure that no unnecessary discomfort or pain.
- **Not have intercourse or use tampons for 48 hours following insertion to prevent infection.**

Contraindications to IUD :

- **Uterine anomaly.**
- **Endometritis or septic abortion in the past 3 months (immediately post-septic abortion),**
- **Untreated cervicitis/vaginitis, including bacterial vaginosis**
- **Multiple sexual partners (increased STI risk)**
- **Immunosuppression (AIDS is a contraindication unless clinically well on antiretroviral therapy)**
- **History of PID**

Thank

