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Mother & Child



MSD for mothers

Emergency Contraception

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Emergency Contraception

- ▶ DEFINITION
- ▶ Any treatment that can be used to prevent pregnancy after sexual intercourse is termed "emergency contraception".



Methods of emergency contraception

- ▶ **1. Administration of a contraceptive pill**
- ▶ Also referred to as the "morning-after pill" (unfortunately, this term creates the false impression that treatment should begin the day after intercourse, whereas it should begin as soon as possible). There are 3 types of contraceptive pills that can be used:
- ▶ pills containing progestogens only (levonorgestrel)
- ▶ pills containing a combination of estrogen and progestogen (no longer considered suitable for emergency contraception)
- ▶ pills containing anti-progestogen (mifepristone, ulipristal acetate)



Methods of emergency contraception





Methods of emergency contraception





Methods of emergency contraception

- ▶ 2. Placement of a copper intrauterine coil (copper-type)





What are the indications for the use of emergency contraception?

- ▶ Unprotected sexual intercourse
- ▶ Failure of a used contraceptive method
- ▶ Tear or displacement of condom
- ▶ Failure to take a contraceptive tablet during week 1
- ▶ Displacement of diaphragm or cervical cap
- ▶ Failure to take 3 or more tablets during weeks 2 or 3
- ▶ Detachment of contraceptive patch
- ▶ Delayed Depo-Provera injection for more than 2 weeks
- ▶ Failure to take progestogen tablet
- ▶ Ejaculation on external genital organs
- ▶ Sexual abuse / rape of woman not using any method of contraception



When should emergency contraception be used?

- ▶ Since it is difficult for a woman to know the fertile window of her menstrual cycle, emergency contraception is recommended regardless of day of cycle.
- ▶ Moreover, even though hormonal emergency contraception is not recommended for regular use, it should not be avoided because of the very significant risks it prevents.



Mechanism of action

- ▶ Depending on the method used, emergency contraception is thought to be achieved through interference with either the natural mechanism of follicular maturation or ovulation or the quality of cervical mucus or fertilization or the transport of the zygote.
- ▶ Very often, the same method of emergency contraception can interfere with more than one mechanisms.



Dosage of emergency contraception hormonal formulations

- ▶ Levonorgestrel formulations are used in a regimen of one single 1.5mg dose or two 0.75mg doses taken 12 hours apart, and must be taken within 72 hours after intercourse for their effect to be considered satisfactory.
- ▶ Ulipristal is administered as one single 30mg dose and can be taken within 120 hours after intercourse. Mifepristone can be taken within 120 hours after intercourse in a single 50mg dose.



Clinical laboratory testing prior to the use of hormonal emergency contraception

- ▶ If the tablet is taken within the first 24 hours, then the success rate ranges from 89 - 97.9%. This rate drops to 58% for levonorgestrel if taken after 72 hours, 50% for ulipristal if taken after 120 hours, and 83% for mifepristone if taken after 120 hours.



Side effects of hormonal emergency contraception

- ▶ Clinical laboratory testing is usually not required, since effectiveness is related to the start time of treatment and the usual contraindications of these medications are not applicable.



Side effects of hormonal emergency contraception

- ▶ Nausea (23%) and vomiting (4%). The simultaneous administration of an antiemetic reduces the risk of nausea and vomiting. If there is vomiting after taking the tablet, the dose must be repeated within 2 hours.
- ▶ Irregular bleeding. Following the use of emergency contraception, menstruation often occurs a week before or after it is expected. Moreover, the woman may experience irregular bleeding or spotting up to one month later, without requiring any treatment.



Side effects of hormonal emergency contraception

- ▶ Dizziness, headache and fatigue
- ▶ Breast tenderness
- ▶ Diarrhea
- ▶ Extrauterine pregnancy
- ▶ Abdominal pain



Drug interaction between hormonal emergency contraception medications and other medications

- ▶ Hormonal emergency contraception should not be administered together with Rifampicin, antiretrovirals and certain antiepileptics.
- ▶ Moreover, liver enzyme inducers reduce the contraceptive effect of emergency contraception.



Administration of hormonal emergency contraception to women under 18

The administration of hormonal emergency contraception to women under 18 years of age is considered safe.



Pregnancy / breastfeeding and emergency contraception

- ▶ If the woman is already pregnant, emergency contraception is not required. If the woman's period is late, a pregnancy test should first be performed to ensure that the woman is not pregnant and then treatment should be taken.
- ▶ If the woman is already pregnant and receives treatment with hormonal emergency contraception, there is no need to worry as there are no studies that link the administration of emergency contraception to fetal damage or complications during pregnancy.



Pregnancy / breastfeeding and emergency contraception

- ▶ There is no contraindication for the use of emergency contraception during breastfeeding. However, it is best to avoid breastfeeding for up to 6 hours after taking the tablet, since an amount of the drug passes into breast milk.



How often can hormonal emergency contraception be used?

- ▶ It should be used in every emergency.
- ▶ It can even be used twice during the same cycle; there is, however, a great risk of severe menstrual disturbances.
- ▶ It is recommended to start using some contraceptive method immediately after taking emergency contraception and until the next menstrual period.
- ▶ If emergency contraception is used more than twice a year, the woman is advised to discuss a more appropriate method of contraception with her gynecologist.



Can women with contraindications to oral contraceptive use take hormonal emergency contraception?

The World Health Organization recommends the use of hormonal emergency contraception to women with contraindications to oral contraceptive use, because the benefits are more than the risks and the duration of the drug's effect is limited.



Hence, emergency contraception may be administered to women who:

- ▶ Breastfeed
- ▶ Have a history of ectopic pregnancy
- ▶ Suffer from angina pectoris
- ▶ Suffer from migraines
- ▶ Have a severe liver disease
- ▶ Have a history of severe cardiovascular complication



When should emergency contraception not be taken?

- ▶ In case of sensitivity or allergy to any of the ingredients of a particular emergency contraception method.



Emergency contraception and sexually transmitted diseases

- ▶ It must be clarified that emergency contraception does NOT protect against sexually transmitted diseases.
- ▶ In case of a suspect or manifest sexually transmitted disease, the appropriate tests should be performed.



Copper intrauterine coil (Copper - T IUD)

- ▶ The intrauterine coil considered most suitable for emergency contraception is the intrauterine T-shaped copper coil (Copper - T).
- ▶ This intrauterine coil is a T-shaped device that is fitted into the uterus by a gynecologist. It must be placed as soon as possible within 120 hours after intercourse.
- ▶ Having achieved emergency contraception, it may remain in place as a permanent means of contraception.
- ▶ The fitting of an intrauterine coil within 5 days after intercourse is the most effective method of emergency contraception.

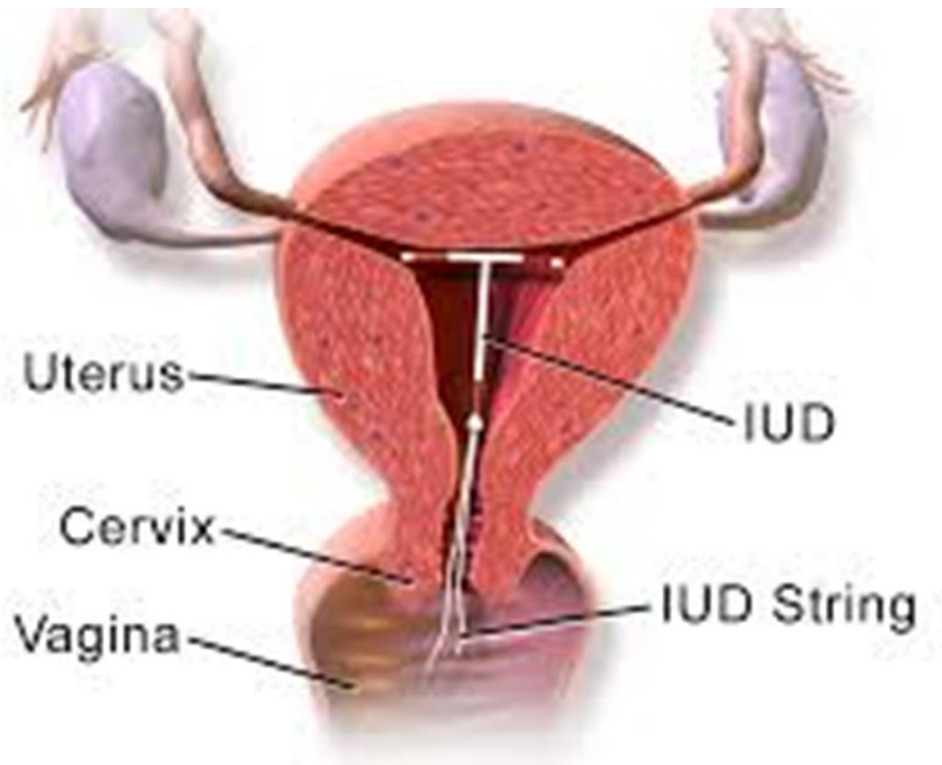


Copper intrauterine coil (Copper - T IUD)





Copper intrauterine coil (Copper - T IUD)



Intrauterine Device (IUD)



IUD placement as emergency contraception method

The following should be taken into account for the placement of an IUD as a method of emergency contraception:

- ▶ Pregnancy must first be ruled out by a pregnancy test.
- ▶ There should be no signs of active vaginal or cervical infection, nor any recent inflammatory disease episodes.



IUD placement as emergency contraception method

- ▶ During placement, cultures for chlamydia and gonorrhoea must be obtained.
- ▶ IUD insertion is performed at a gynecologist's practice.
- ▶ The woman sits on a special gynecological examination chair (boom) and is placed in the position of a pelvic exam. A small device called a speculum is then inserted in the vaginal opening.



IUD placement as emergency contraception method



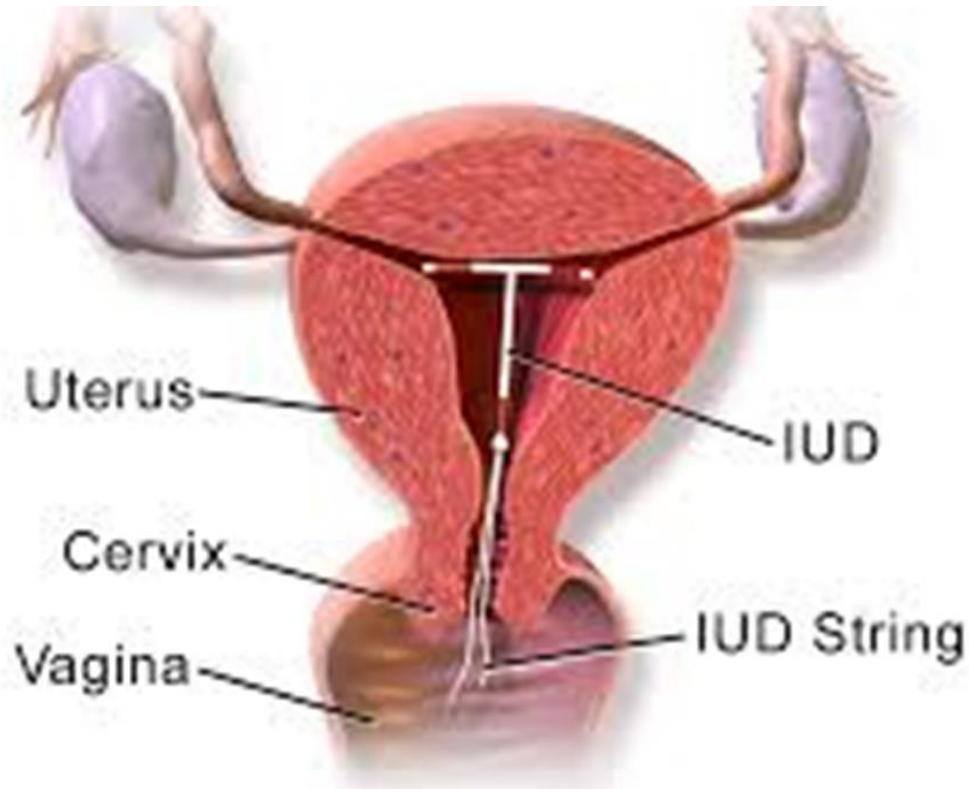


IUD placement as emergency contraception method

- ▶ The doctor inspects the vagina and cervix with the use of special lighting and then inserts the IUD into the uterus through the cervix.



IUD placement as emergency contraception method



Intrauterine Device (IUD)



IUD placement as emergency contraception method





IUD placement as emergency contraception method

- ▶ The lower end of the IUD which consists of two strings remains in the vagina, so as to enable the removal of the coil when necessary.
- ▶ In order to ensure proper placement of the IUD, an ultrasound is performed after its placement. The ultrasound must be repeated after a month and then every year, if the coil remains in place.



IUD placement as emergency contraception method

- ▶ After placement, the woman may feel a slight discomfort due to the reflex contraction of the uterus, which can be prevented by taking a mild analgesic or anti-inflammatory drug prior to placing the coil.
- ▶ A Cochrane Review showed no benefit from administering a prophylactic dose of antibiotics during placement. Nevertheless, the prophylactic use of antibiotics in women believed to be at a high risk for sexually transmitted diseases should be considered.



Side effects of hormonal emergency contraception

- ▶ Pelvic pain
- ▶ Pelvic infection
- ▶ Abnormal vaginal bleeding
- ▶ Uterine perforation



Levonorgestrel intrauterine coil

- ▶ While several studies are being performed on the use of levonorgestrel-releasing IUDs (Mirena) as a method of emergency contraception, they are not recommended so far.



Where can one obtain treatment for emergency contraception in Greece?

- ▶ In Greece, you can purchase levonorgestrel, ulipristal and mifepristone tablets, as well as IUDs (coils), at pharmacies. Mifepristone, which is essentially an abortifacient, and ulipristal require a medical prescription.
- ▶ Levonorgestrel is sold over-the-counter.
- ▶ IUDs are sold in pharmacies but must be inserted by a gynecologist.



Conclusion - Afterword

- ▶ Nowadays, both contraceptive tablets and IUD placement are considered effective in preventing unwanted pregnancies.
- ▶ Always keep in mind that the sooner a contraceptive treatment is taken, the more effective it is.
- ▶ Finally, seeing that an unwanted pregnancy directly affects a person's quality of life, emergency contraception awareness is urgently required for all individuals of childbearing age.



References

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Images

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