

# Emergency contraception

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- ▶ It's a method of contraception used as an emergency procedure before menstruation is missed to prevent pregnancy following unprotected intercourse or expected failure of contraception.
- ▶ EC is any method of contraception used after intercourse and before potential time of implantation.
- ▶ Alternative names postcoital contraception , morning after contraception , interception.



# Characters :

- ▶ Its an one time procedure not a routine approach to contraception.
- ▶ Used postcoital.
- ▶ Its objective is prevention of pregnancy.



# Historical background

- ▶ Abu Bakr Muhammad al Razi first immediately after ejaculation let arise roughly , squeeze and blow her nose seven times and call out in a loud voice , she should jump violently backwards 7-9 times.
- ▶ Traditional methods have been used for decades as high doses vit.C , aspirin or chloroquine.
- ▶ Vaginal douches of coca cola, baking soda.
- ▶ Mid 1920s effect estrogenic ovarian extract to prevent pregnancy.



- ▶ 1967 the first widely used methods were 5 days of treatment with DES in USA as a high dose estrogen.
- ▶ 1970 YUZPE method was developed as preparation contain estradiol/ LNG.
- ▶ 1975 PROGESTIN only postcoital pill was investigated.
- ▶ 1975 copper IUCD was used as first time as EC.
- ▶ 1980s Danazol was tested as EC.
- ▶ 1980s YUZPE became as a standard EC.



- ▶ 1998 after a large WHO study YUZPE regimen was gradually withdrawn and LNG widely used.
- ▶ 2002 China was the first country used mifepristone as EC.



# Indications:

- ▶ Unplanned sexual intercourse ( sexual assault - return of husband ).
- ▶ Contraceptive accident ( break of condom).



# Advantages:

- ▶ Save the couples from unwanted pregnancies.
- ▶ From unnecessary operative interventions for fear of pregnancy.
- ▶ From agony waiting for next cycle.
- ▶ Prevent adolescent pregnancy.
- ▶ Reduce unsafe abortions.





# Mechanism of action:

- ▶ Interfere with ovulation **only when given early delay LH surge**
- ▶ Interfere with fertilization of ovum **as regard sperm ascent and tubal motility / cx mucous.**
- ▶ Interfere with implantation **the main mechanism of action as regard renders endometrium not suitable for implantation**
- ▶ Induction of early abortion **the least one probable**



# Types:

## Hormonal (emergency contraceptive pill)

- ▶ Estrogen pills : EE 5mg 1×1×5 within 72 hour

- ▶ Combined pills : so called **Yuzpe** regimen

(0.25 mg LNG + 50 mic. EE )

Two doses within 72 hour of unprotected intercourse and repeated after 12 hour

(0.15 mg LNG + 30 mic. EE )

Four doses within 72 hour of unprotected intercourse and repeated after 12 hour

- ▶ Pops : LNG 0.75 mg within 72 hour and repeated after 12 hour



## ▶ IUD :

up to 5:6 days of unprotected intercourse.

## ▶ RU 486 - Mifepristone :

Single dose 600 mg orally within 72 hour of unprotected intercourse.

## ▶ Danazol :

400 mg tablet one tablet within 72 hour and other tablet after that by 12 hour.



# Contraindications:

## hormonal:

- ▶ History of severe CVS complications.
- ▶ Thromboembolic complications.
- ▶ Migraine.
- ▶ Liver disease.
- ▶ Angina pectoris.



# IUCD:

- ▶ Pelvic infection
- ▶ DUB
- ▶ Nulliparous
- ▶ Uterine anomaly
- ▶ Allergy to copper



# Side effects:

## hormonal

- ▶ Nausea in 50 % in YUZPE regimen and in 20% in LNG.
- ▶ Vomiting in 20 , 5 %.
- ▶ Irregular uterine bleeding.
- ▶ Headache, dizziness, fatigue and breast tenderness.



# IUCD

- ▶ Bleeding
- ▶ Pain
- ▶ Expulsion
- ▶ Pelvic infection.



THANK YOU

