

FAMILY PLANNING

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CONTRACEPTIVE METHODS

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**SPACING
METHODS**

**TERMINAL
METHODS**

SPACING METHODS

- BARRIER METHODS
 - a) PHYSICAL METHODS
 - b) CHEMICAL METHODS
 - c) COMBINED METHODS
- INTRA-UTERINE DEVICES
- HORMONAL METHODS
- POST-CONCEPTIONAL METHODS
- MISCELLANEOUS

TERMINAL METHODS

➤ MALE STERILISATION

➤ FEMALE STERILISATION

HORMONAL CONTRACEPTIVE METHODS

- Hormonal contraceptives when properly used are the most effective methods of contraception
- They provide the best means of ensuring spacing between one childbirth and another
- More than 65 million people in the world are estimated to be taking the “pill”

CLASSIFICATION

a) ORAL PILLS

1. Combined pills
2. Progestogen only pill
3. Post coital pill
4. Once a month pill
5. Male pill

b) DEPOT FORMULATIONS

1. Injectables
2. Subcutaneous implants
3. vaginal rings

ORAL PILLS

1. **COMBINED PILL:**

- It is one of the major spacing methods of contraception. It contains 30-35 mcg of a synthetic oestrogen and 0.5 to 1 mcg of a progesterone.
- The pill should be taken at a fixed time everyday.



- The pill is given orally for 21 days starting on the 5th day of menstrual cycle followed by a break of 7 days during which menstruation occurs. Give iron supplements during these 7 days.
- This is called withdrawal bleeding.
- If you miss 1 tablet take as soon as you remember
- 3 types
 1. Monophasic
 2. Biphasic
 3. Triphasic

Mode of action of oral pill:

- Suppression of ovulation by inhibiting the release of FSH & LH (mainly by estrogen)
- Progesterone render the cervical mucus thick and scanty and inhibit the sperm penetration.

Effectiveness :

- If taken according to the prescribed regimen oral contraceptives of the combined type are 100% effective.

BENEFICIAL EFFECTS

Contraceptive benefits

Prevention of unwanted pregnancy (failure rate- 0.1per 100 women year).

Non contraceptive benefits

a. Relief of:

Menorrhagia (50%)

Dysmenorrhoea (40%)

Premenstrual tension syndrome

b. Improvement of:

Iron def. Anemia,

Hirsutism,acne,

Endometriosis,

Autoimmune disorders of thyroid,

Rheumatoid arthritis.

c. marked reduction in:

- pelvic inflammatory disease,
- benign breast cancer,
- ectopic pregnancy,
- fibroid uterus,
- functional ovarian cysts,
- carcinoma of ovary (40%)
- carcinoma of endometrium (50%),
- protection against osteoporosis.

Side effects of OC pills

- Mild (no need to withdraw OC)

Estrogenic effects	Progestogenic effects
Nausea	Increase in appetite
Migraine	Weight gain
Breast tenderness	Acne
Mild oedema	Hirsutism (mild)
Withdrawal bleeding which at times fail to occur	Decrease in libido
	Increase in body temperature

Side effects of OC pills

- Moderate (may warrant discontinuation of OC)

Estrogenic	Progestogenic
Vertigo	Breakthrough bleeding (spotting)
Leg cramps	Monilial vaginitis (urethral dilatation and bacteriuria)
Uterine cramps	Amenorrhoea (even after stopping OC)
Precipitation of diabetes	

Side effects of OC pills

- Severe(needs stoppage of OC)

Estrogenic	Progestogenic
Thromboembolism	Myocardial infarction
Cholestatic jaundice	Cerebrothrombosis
Gall stones	
Hepatic adenoma	

Contraindications of OC pills(absolute)

- Thromboembolic, coronary and cerebrovascular disease or a history of it.
- Moderate to severe hypertension; hyperlipidemia.
- Active liver disease, hepatoma or h/o jaundice during past pregnancy.
- Suspected/overt malignancy of genitals/breast.
- Porphyria
- Impending major surgery- to avoid postoperative thromboembolism.

Contraindications of OC pills(relative)

- Diabetes
- Obesity
- Smoking
- Undiagnosed vaginal bleeding
- Age above 35 years
- Migraine
- Gall bladder disease

If pregnancy occurs during the use of OC pills

- It should be terminated by suction-evacuation, because there is risk of
- Malformations,
- Genital carcinoma of female offspring
- Undescended testes in male offspring

2. PROGESTERONE ONLY PILL

- It is called as minipill or micropill .it contains only progesterone which is given in small doses through out the cycle.
- These pills have an increased pregnancy rate so not being used , but can be used for women with cardiovascular problem and for those with the risk factors for neoplasia.

Side effects of progestin only pills

- Acne
- Hirsutism
- Amenorrhoea

3. POST COITAL CONTRACEPTION:

It is used within 48hrs of unprotected intercourse.

Two methods are available.

a) IUD:

e.g. copper device

b) Hormonal:

Progestin-only emergency contraceptive pills contain levonorgestrel (0.75mg), either as a single tablet or as a split dose of two tablets taken 12 hours apart), effective up to 72 hours after intercourse.

4. ONCE A MONTH LONG ACTING PILL

- Quniestrol , a long acting estrogen is given in combination with a short acting progesterone.
- Disadvantage: high pregnancy rate and irregular bleeding.

5. MALE PILL:

Testosterone & progestin may lower sperm count

The approach is

- a) preventing spermatogenesis.
- b) interfering with sperm storage.
- c) preventing sperm transport.
- d) affecting the seminal fluid constitution.
- An ideal male contraceptive will decrease the sperm count while leaving testosterone at normal values.

b) DEPOT FORMULATIONS

Injectable contraceptives, sub dermal implants and vaginal rings come in this category.

1. Injectable contraceptives:

There are two types:

A-PROGESTERON ONLY INJECTABLES:

(i) DMPA:

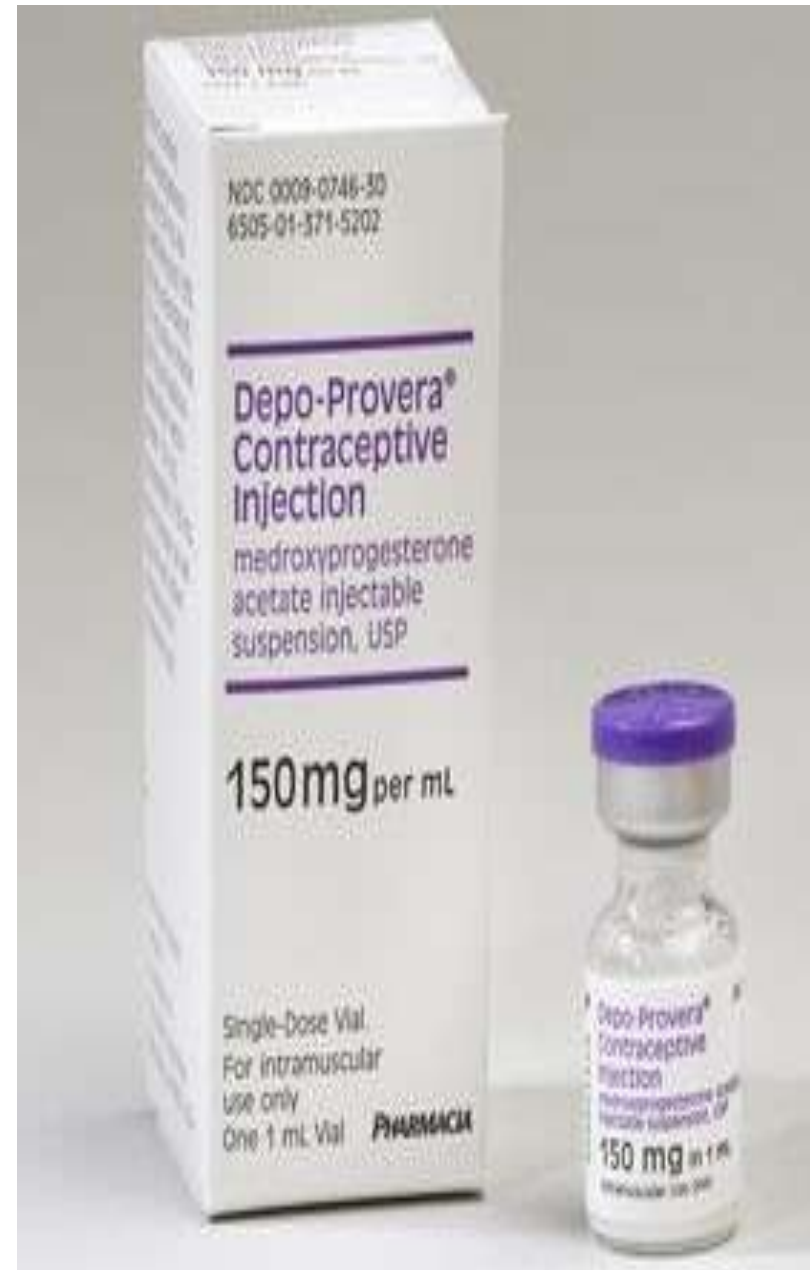
Depot medroxy -progesterone acetate.

Dose is i.m injection of 150mg every 3months.

It exerts its effects by suppression of ovulation.

- **Indirect effects:** on endometrium
- **Direct effects:** on the fallopian tubes and the production of cervical mucous

- Acceptable in the postpartum period as a means of spacing.
- Side effects:
weight increase, irregular menstrual bleeding.



(ii) NET-EN

- Norethisterone enantate is given as i.m injection dose of 200mg. every 60 days.
- Contraceptive action is by inhibiting ovulation and progesterogenic effects on cervical mucus.

ADMINISTRATION:

- Both DMPA ,NET-EN should be given during first five days of menstrual period.
- The injection site should never be massaged following injections.

SIDE-EFFECTS:

- Unpredictable bleeding
- Amenorrhea

CONTRAINDICATIONS:

- Breast cancers, all genital cancers.

(iii) DMPA-SC 104 mg

- A new lower dose formulation of DMPA, depo-sub Q provera 104 is injected under the skin rather than in the muscle.
- It contains 104 mg of DMPA rather than 150 mg in intramuscular formulation.
- DMPA-SC is given at 03 months interval. This is as effective as injectables, and pattern of bleeding and amount of weight gain is the same.

Side effects

- Disruption of normal menstrual cycle, manifested by episodes of unpredictable bleeding (at times prolonged and at other times excessive)
- Women may become amenorrhoeic.

Contraindications

- Cancer of breast and genitals
- Undiagnosed uterine bleeding
- Suspected malignancy
- History of high blood pressure
- Heart attack
- Deep vein thrombosis
- A women breast feeding a baby less than 6 weeks

B. COMBINED INJECTABLE :

- They contain a progestogen and an oestrogen.
- Given at monthly intervals.
- Act by suppressing ovulation ,cervical mucus is affected mainly by progestogen and inhibits sperm penetration.
- **CONTRAINDICATIONS:**
 - confirmed or suspected pregnancy;
 - past or present evidence of thromboembolic disorders
 - cerebrovascular or coronary artery disease
 - focal migraine
 - malignancy of breast
 - diabetes with vascular complications.

2. SUBDERMAL IMPLANTS:

- **Norplant :**

- it consists of 6 silastic capsules containing 35mg of levonorgesterel.

- The capsules are implanted beneath the skin of forearm or upper arm.
- Effective contraception is provided for 5 yrs.

- The contraceptive effect of Norplant is reversible on removal of capsules.

DISADVANTAGES:

Irregularities of menstrual bleeding and surgical procedures for inserting and removal of implants.

3. VAGINAL RINGS

- Vaginal rings containing levonorgestrel are highly effective.
- The hormone is slowly absorbed through the vaginal mucosa, bypassing the digestive tract and liver and allowing a potentially lower dose.
- The ring is worn in the vagina for 3 weeks and removed for the 4th week.

