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**Question: Discuss contraception and their types with details**

Contraception is a method of preventing unwanted pregnancy, that is, it prevents the sperm from fertilizing the egg. There are different methods of prevention. Commonly they are called birth control measures. Different methods are used based on preference or to avoid complications, there are two main methods hormonal methods which affect the hormones of the body and secretes some hormones to prevent contraception and the barrier method which creates a barrier against the sperm from fertilizing the egg. Here are some examples:

Hormonal

Vaginal rings: This is a ring about two inches in diameter, which is inserted into the vagina. The ring is removed after three weeks for a week to allow menstruation. A new ring is inserted after 7 days. When in the vagina, the combination of synthetic oestrogen and progestin that the ring releases helps prevent conception.

Implantable rods: A matchstick-sized rod is surgically implanted under the skin of the upper arm. It releases hormones directly into the bloodstream for effective contraception. It lasts for five years.

Contraceptive patch: It is a plastic patch that is placed on the skin which releases hormones into the bloodstream. It lasts about a week and needs to be reapplied for three weeks out of four in the month. The fourth week no patch is used to allow menstruation.

The pill: There are two main types of pills, the Combined Oral Contraceptive Pills (COCs) and Progestin Only Pills (POPs). The COCs interfere with the ovulation process, while the POPs thicken the cervical mucus, thereby making it difficult for sperm to enter the fallopian tubes. Emergency Contraceptive Pills or “morning after” pills utilize a bit of both these actions to prevent conception.

Birth control injections: The chemical depo medroxyprogesterone acetate is an injectable birth control method. The injection is required every 3 months. Unfortunately, it has a tendency to leach calcium from bones causing loss in bone density.

Barrier

Male condoms: It is a thin sheath that covers the penis and collects the sperm as it is ejaculated. The sheath is generally made of latex rubber though a lambskin alternative is available for those who have a latex allergy. They are disposed of after single use. Whilst the latex condoms offer some protection against sexually transmitted diseases, lambskin condoms do not.

Female condoms: Similar to the male condoms, the female condoms are also disposed of after a single use. They are made of plastic and are shaped like a pouch. The thin and flexible condom is inserted in the vagina before sexual intercourse.

Contraceptive sponges: These are foam sponges filled with spermicide. The soft sponge is inserted into the vagina before intercourse to form a barrier against the sperm entering the uterus. The spermicide kills the sperm cells. It needs to stay in the vagina for 6 to 8 hours after intercourse to prevent pregnancy.

Diaphragms: Made of latex, the diaphragm is a shallow cup which is inserted into the vagina before sexual intercourse and blocks sperm from entering the uterus. The diaphragm needs to stay inside the vagina for 6 to 8 hours before it can be removed. It is often used in conjunction with a spermicide. In contrast to condoms, this is reusable for a year or two.

Cervical caps: A silicone cup, quite like a diaphragm, the cervical cap is also inserted into the female’s vagina before sexual intercourse. It can be cleaned and reused for two years before it needs to be replaced. A cervical cap is often laced with a spermicide and needs to stay in place for 6 to 8 hours after intercourse to prevent pregnancy.