

# Review on Birth Control Drugs

## Jhansi Konduru and Vanita P

Department of Biochemistry, Dr. L.B. College, Visakhapatnam, India

Corresponding author: Jhansi Rani Konduru, Department of Biochemistry, Dr. L.B. College, Visakhapatnam, India, Tel: +91-9885352429; E-mail: kondurujhansi68@gmail.com

#### Received Date: May 25, 2014; Accepted Date: May 27, 2014; Received Date: May 29, 2014

**Copyright:** © 2014 Jhansi K, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

# Abstract

Birth control drugs are those which can prevent the pregnancy. In some times people do not want to get pregnancy, in these cases they want to use by doctors prescription. Birth control drugs have many medical uses for women. Sometimes these are harmful. So we can use by drugs within limit, proper suggestion from doctors only.

Keywords Birth control drugs, estrogen, progesterone, symptoms

# Introduction

Birth control Drugs also called as oral contraceptives, they contain hormones like estrogen and progesterone. The birth control drugs are available in different forms like drugs, injections, etc. Birth control drugs are useful prevent pregnancy [1]. Now a day different methods are used to birth control, like topical (skin) patches, and slow-release systems (vaginal rings, skin implants, and contraceptive-infused intrauterine devices, hormonal contraception that is drug. Birth control drugs are works in women's body by control the synthetic hormones like estrogen and progestin [2]. A woman takes the drug by mouth to prevent pregnancy and it is effective up to 99.9% in the body. These drugs prevents ovulation in the body and it controls the new eggs are released by a women on the drug since her body is tricked into believing she is already pregnant [3].

As per mentioned above Birth control Drugs also called as oral contraceptives contain synthetic hormones. These are two types these are combination drugs and progestin-only drugs. Combination drugs contain both estrogen and progestin and mainly work by preventing the ovaries from releasing eggs (ovulation) and by making the lining of the uterus thinner. They also thicken the cervical mucus, which helps to prevent the entry of sperm into the uterus. Progestin-only drugs primarily work by thickening the cervical mucus and less often they prevent ovulation. Taking birth control drugs daily maintains the level of hormones that is needed to prevent pregnancy [4].

## Classification

Birth control drugs are having many different ways to classify them. One of the classifications is mentioned below. There are different types of combination birth control drugs that contain estrogen and progestin that are referred to as

#### Monophasic

## Biphasic

#### Triphasic

Monophasic birth control drugs deliver the similar quantity of estrogen and progestin every day.

Biphasic birth control drugs deliver the same amount of estrogen every day for the first 21 days of the cycle. During the first half of the cycle, the progestin/estrogen ratio is lower to allow the lining of the uterus (endometrium) to thicken as it normally does during the menstrual cycle. During the second half of the cycle, the progestin/ estrogen ratio is higher to allow the normal shedding of the lining of the uterus to occur [5].

Triphasic birth control drugs have constant or changing estrogen concentrations and varying progestin concentrations throughout the cycle. There is no evidence that bi- or triphasic oral contraceptives are safer or superior to monophasic oral contraceptives, or vice versa, in their effectiveness for the prevention of pregnancy.

One way to categorize birth control drugs is by dose. To determine how much estrogen your birth control drug contains, look for the strength of "ethinyl estradiol," the estrogen used in most birth control drugs [6].

Birth control drugs classified by Hormone Content. Those are combined oral contraceptives and Progestin-only contraceptives. Combined oral contraceptives containing an estrogen and a progestin. These are the most effective and most commonly used birth control drugs. Another one Progestin-only contraceptives containing only a progestin. These are less effective and are usually reserved for women who cannot take combined oral contraceptives, such as breastfeeding women or women with clotting disorders.

#### How Does It Work?

Like all ways of secretion family planning, contraception drugs primarily stop organic process (the elease of egg from the ovaries). Consequently, pregnancy cannot occur as a result of there's no egg for the sperm to fertilize. As intercalary measures, the hormones in contraception drugs additionally thicken the cervical mucous secretion to thwart off sperm and skinny the liner of the female internal reproductive organ to forestall implantation of the egg [7].

# How Do I Use It?

You need a prescription to use birth control drugs. Visit your doctor or a healthcare clinic to discuss what type of birth control is right for you.

## Combination drugs come in packs of either 21 or 28 drugs. On drug is taken each day at the same time of day. With the 21-day pack, you will not take any drugs for the last seven days of the month. With the 28-day packs, the last seven drugs are tablets that contain no hormones but are taken to help you stay on a drug-taking routine.

Progestin-only drugs come in packs of 28, and you must take one drug each day at the same time every day. All progestin-only drugs contain hormones. With both types of birth control drugs, the last seven days of the pack is when you will get your period.

# Effectiveness

If taken correctly, birth control drugs are extremely effective in preventing pregnancy. Combination drugs are more than 99 percent effective, while progestin-only drugs are 98 percent effective. However, the drug must be taken every day at the same time to be effective.

# Medical Uses of the Birth Control drug

Polycystic Ovary Syndrome: Birth control drugs work in menstrual periods; they control the hormone levels. Acne and hair growth automatically improve when the hormone levels are decreased.

Endometriosis: Most of the girls suffering with pelvic pain during the menstrual cycle period. When using the Birth control drugs are often prescribed continuously. They will treat endometriosis and work by temporarily preventing periods.

Amenorrhea: Most of the girls suffering with Lack of periods because of stress, low weight, excessive exercise, or damage to the ovaries from radiation. In this case the estrogen hormone is not working in the body. Birth control drugs help to produce the estrogen and which helps to regulate the menstrual cycle. Who are suffered with menstrual periods is irregular birth control drugs can help to regulate the menstrual cycle to every 28 days and provide the body with normal amounts of estrogen. [8].

Menstrual Cramps: birth control drugs regulate the ovulation and lighten periods.

Heavy Menstrual Periods: Birth control drugs can minimize the amount and length of menstrual bleeding.

Acne: birth control drugs controle the Acne, they help to produce the hormones. It will help to control acne from forming.

# **Risks and Disadvantages**

Even though the birth control drugs have many medical benefits of using these birth control drugs but on the same note there is equal number of side effects of these drugs. Most of the women who have taken birth-control drugs, they have side effects in first three months of use. The majority of women have only minor, transient undesired effects. Some side effects are uncommon but may be dangerous like Heart attack, Blood pressure, Depression, Breast tenderness, Migraines and stroke, Blood clots, Headaches, Nausea and vomiting, , Breakthrough bleeding or spotting, Weight gain, Diarrhea or vomiting.

# Conclusion

The present observations on birth control drugs should be discussed in light of anticipated preventive surgery to reduce the risk of breast or ovarian cancer. Even though the birth control drugs have advantages, but they have side effects too. Upon doctor's suggestion only it is better to use within the limit and also use the appropriate drug in order to reduce the symptoms. However the research on the birth control drugs shows side effects on health. Hence it is suggested to minimize the use of the pills or should be used under proper guidance of the physician. This will reduce the side effects of these birth control drugs

# References

- 1. http://www.emedicinehealth.com/
- birth\_control\_medications\_contraceptives/article\_em.htm
- 2. http://inventors.about.com/library/inventors/blthedrug.htm
- 3. http://www.webmd.com/sex/birth-control/birth-control-drugs
- 4. http://shcs.ucdavis.edu/topics/contraception/drug.html
- http://www.medicinenet.com/oral\_contraceptives\_birth\_control\_drugs/ article.htm
- 6. http://women.emedtv.com/birth-control-drugs/types-of-birth-control-drugs.html
- 7. http://www.healthline.com/health/birth-control-drugs
- 8. http://www.youngwomenshealth.org/med-uses-ocp.html
- 9. http://www.emedexpert.com/compare/birth-control-advantages.shtml
- Talwar GP, Rulli SB, Vyas H, Purswani S, Kabeer RS, et al. (2014) Making of a Unique Birth Control Vaccine against hCG with Additional Potential of Therapy of Advanced Stage Cancers and Prevention of Obesity and Insulin Resistance. J Cell Sci Ther 5:159.
- 11. http://jnci.oxfordjournals.org/content/94/23/1773.long

## Page 2 of 2