

HPV AND CONTRACEPTIVE UPDATE

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HPV Update

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Overview



- Genital human papillomavirus (also called HPV) is one of the most common sexually transmitted infection (STI).
- There are over 100 types of HPV, about 30 can infect the genitals of males and females.

The Good News...



- While viral STIs are incurable, there is some good news:
 - All are treatable
 - Excellent medications and treatments are available to manage symptoms.
 - Vaccines are available for Hepatitis B and HPV

HPV



- Most people with HPV do not develop symptoms or health problems from it.
- Certain types of HPV can cause genital warts in males and females.
- Other HPV types can cause cervical cancer. These types can also cause other, less common but serious cancers, including cancers of the vulva, vagina, penis, anus, and head and neck (tongue, tonsils and throat).

HPV



- The types of HPV that can cause genital warts are not the same as the types that can cause cancer. There is no way to know which people who get HPV will go on to develop cancer or other health problems.

HPV Transmission



- HPV is passed on through genital contact, most often during vaginal and anal sex.
- HPV may also be passed on during oral sex and genital-to-genital contact.
- HPV can be passed on between straight and same-sex partners.
- HPV can be passed even when the infected partner has no signs or symptoms.

Statistics



- Approximately 20 million Americans are currently infected with HPV.
 - ▣ Another 6 million people become newly infected each year.
 - ▣ HPV is so common that at least 50% of sexually active men and women get it at some point in their lives.

Statistics



- About 1% of sexually active adults in the U.S. have genital warts at any one time.
- Each year, about 12,000 women get cervical cancer in the U.S.

Statistics



- Other cancers that can be caused by HPV are less common than cervical cancer. Each year in the U.S., there are about:
 - 3,700 women who get vulvar cancer
 - 1,000 women who get vaginal cancer
 - 1,000 men who get penile cancer
 - 2,700 women and 1,700 men who get anal cancer
 - 2,300 women and 9,000 men who get head and neck cancers.

Prevention



- Abstinence
- Limit number of partners
- Testing
- Communication with partner
- Condom use
- Vaccine

Vaccine

- The HPV vaccine is recommended for 11 and 12 year-old girls. It is also recommended for girls and women age 13 through 26 years of age who have not yet been vaccinated or completed the vaccine series.
- The vaccine can also be given to girls 9 or 10 years of age.

Vaccine



- There is no need for girls/women to get an HPV test or Pap test to find out if they should get the vaccine.
 - ▣ Neither of these tests can tell the specific HPV type(s) that a woman has (or has had in the past), so there's no way to know if she has already had the HPV types covered by the vaccine.

Vaccine



- The 3 shot HPV vaccine provides protection against 4 strains of HPV:
 - ▣ 6, 11, 16 and 18 (the strains that cause 70% of cervical cancer and 90% of genital warts)
 - ▣ The vaccine is highly effective in preventing those types of HPV and related diseases in young women.
 - ▣ Research suggests that vaccine protection will last a long time. More research is being done to find out if women will need a booster vaccine many years after getting vaccinated to boost protection.

Vaccine



- The vaccine does not protect against all types of HPV therefore it will not prevent all cases of cervical cancer.
 - ▣ About 30% of cervical cancers will not be prevented by the vaccine, so it will be important for women to continue getting screened for cervical cancer (regular Pap tests).
 - ▣ New guidelines for Pap tests.

Vaccine Safety



- This vaccine has been licensed by the FDA and approved by CDC as safe and effective. It was studied in thousands of females (ages 9 through 26 years) around the world and its safety continues to be monitored by CDC and the FDA.
- Studies have found no serious side effects. The most common side effect is soreness in the arm (where the shot is given).

Vaccine Safety



- There have recently been some reports of fainting in teens after they got the vaccine. For this reason, it is recommended that patients wait in their doctor's office for 15 minutes after getting the vaccine.

Cost



- The cost of each dose is \$125 (\$375 for the full series.)
- Insurance coverage will vary by company. Most large companies will cover recommended vaccines.
- The vaccine is available for eligible children through the Vaccines for Children Program.

What about Women Over Age 26?



- New research is being done on the vaccine's safety and efficacy in women older than 26 years of age.
- The FDA will consider licensing the vaccine for these women when there is enough research to show that it is safe and effective for them.

What About Boys and Men?



- In September, an FDA advisory committee voted to recommend approval of the vaccine (Gardasil) for males ages 9 to 26 to prevent genital warts.
 - ▣ It is possible that vaccinating males will have health benefits for them by preventing genital warts and rare cancers, such as penile and anal cancer.
 - ▣ It is also possible that vaccinating boys/men will have indirect health benefits for girls/women.

What About Boys and Men?



- Gardasil is up for FDA consideration only as a way to prevent genital warts in boys -- not to prevent cancer in males or to curb transmission of the HPV virus to women.
- It's now up to the FDA to decide whether to approve Gardasil to prevent genital warts in boys and young men. The FDA often follows the recommendations of its advisory committees, but it isn't required to do so.



IUD

Keep in mind...



- Family planning goals will change over time
 - Postpone pregnancy
 - Spacing of pregnancies
 - Cease childbearing

- The best method of contraception for patients is one that will be in concert with their wishes, preferences, concerns and lifestyle.

IUD



- Intrauterine contraception is poised for a major renaissance in the United States, due in part to the good news about safety, efficacy, and possible non-contraceptive therapeutic benefits.
 - ▣ More than 25 million ParaGard IUDs have been distributed in 70 countries.
 - ▣ Mirena was approved for use in 2000 (Women in Europe had used it for a decade) and an estimated 3 million women have used it.

IUD



- Surveys among women reveal that only a minority of women view IUDs favorably... except among those women using IUDs.
 - ▣ Among women using an IUD for contraception, 99% report being “very” or “somewhat satisfied” with the method compared with 92% of implant users and 91% of oral contraceptive users who held these views.

(Contraceptive Technology Communication, Inc., 2004)

IUD Overview



- Intrauterine Device (IUD)
 - ▣ Also referred to as Intrauterine System (IUS) or Intrauterine Contraception (IUC)
- 2 Options:
 - ▣ ParaGard
 - 12 years (previous 10 years)
 - Non-hormonal
 - ▣ Mirena
 - 5 years
 - Hormonal (progestin)

IUD

□ **Previously:**

- The IUD was not generally seen as an option for women who had not yet had a child

□ **New Information:**

- Teens and nulliparous women can use the IUD.
- No more likely to get CT or GC or to experience PID. The IUD will not further PID. No greater likelihood of infertility.

What Does The WHO Say Regarding Adolescents?



- In general, adolescents are eligible to use any method of contraception and must have access to a variety of contraceptive choices. Age alone does not constitute a medical reason for denying any method to adolescents. While some concerns have been expressed regarding the use of certain contraceptive methods in adolescents these concerns must be balanced against the advantages of avoiding pregnancy.

WHO Medical Eligibility Criteria for Contraceptive Use



- Category 1: A condition for which there is no restriction for the use of the contraceptive method.
- Category 2: A condition where the advantages of using the method generally outweigh the theoretical or proven risks.

WHO Medical Eligibility Criteria for Contraceptive Use



- Category 3: A condition where the theoretical or proven risks usually outweigh the advantages of using the method.
- Category 4: A condition which represents an unacceptable health risk if the contraceptive method is used.

IUD Safety



- Both IUD options generally fall into Category 1 or 2 of the WHO Medical Eligibility Criteria.
- In some cases, Category 3 or 4 is cited for specific cases such as pregnancy, postpartum, anatomical abnormalities, active PID infection, HIV positive, current STI.

IUD

Mechanism of Action

- ParaGard:

- Wrapped in copper which irritates the lining of the uterus.
- In addition to the function of the copper, the presence of the “foreign body” disrupts the environment in the uterus and fallopian tube therefore impairing sperm function and preventing fertilization. This is the primary function. Therefore, an IUD is not an abortifacient.

IUD

Mechanism of Action

- Mirena:
 - In addition to disrupting the environment in the uterus and fallopian tubes, the Mirena (due to the hormonal nature) can also suppress ovulation, thicken cervical mucus and reduce the endometrium.

IUD

Effectiveness

- Both options rank in the top tier of contraceptive methods in effectiveness.

% of women experiencing an unintended pregnancy within the first year of use:

ParaGard

Mirena

Typical: .08

Typical: .01

Perfect: .06

Perfect: .01

IUD

Possible Advantages and Disadvantages

□ Strong Points:

- Highly effective
- Long-lasting
- Well liked by users
- Cost effective
- Likelihood of expulsion is very low
- Convenient
- Protective against ectopic pregnancy
- Possible protective factors against endometrial cancer

□ Weak Points:

- No STI protection (similar to other hormonal methods)
- Altered bleeding patterns
- Cramping and pain with insertion
- Expulsion
- Perforation

Placing the IUD

- “Work Up”
 - ▣ Possibly a pap
 - ▣ CT and GC screen
 - ▣ Patient counseling
- May be a two visit service
 - May be asked to wait until menstruating for placement
- May be given a medicine to facilitate placement
 - Especially nulliparous women

Placing the IUD

- “Sounding” the uterus
 - Measuring the depth of the uterus for accurate placement
 - Cramping may take place
 - Contraindication= 6 cm
 - No upper size limit

- Can be placed after a termination
 - Can be placed on the same day

IUD



- General information:
 - FPACT covered
 - Strings are cut very short, should not interfere with sexual activity
 - Check the string periodically
 - Can't be removed by the individual
 - ParaGard is popular because it's non-hormonal and lasts longer
 - Mirena is popular due to other benefits
 - IUD can be used back to back

IUD

Special Considerations



- Information specific to teens
 - Either IUD is an option for teens
 - Not necessarily a one visit service

- All women
 - Counseling should include information on STI prevention.

IUD



- Key Messages:
 - Intrauterine contraception is highly convenient.
 - ParaGard and Mirena rival surgical sterilization in efficacy.
 - Intrauterine contraception provides long term protection against pregnancy yet is promptly reversible
 - The risk of upper-genital-tract infection is minor.



Implanon

Overview

- Implanon is a small, thin, single-rod, hormonal implant for subdermal use that offers women up to 3 years of pregnancy protection. (Implanon is 4 cm in length and 2 mm in diameter)
- It was approved in July 2006 by the FDA for use in the United States.



Overview



- Since 1998, there have been more than 2.5 million Implanon units prescribed in more than thirty countries.
- It is a progestin-only method of birth control and does not contain estrogen. Implanon does not contain latex or silicone and will not dissolve.
- Implanon is a reversible method of contraception.

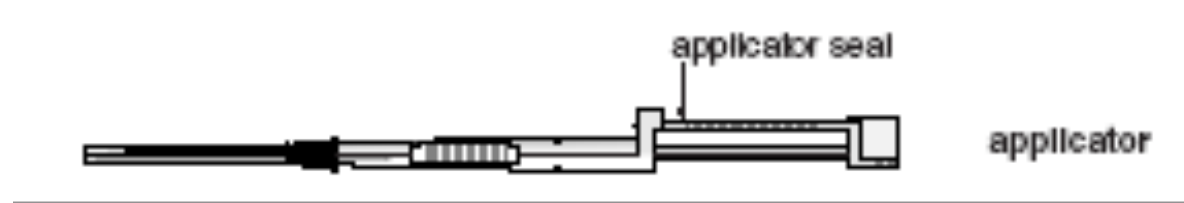
Mechanism of Action



- Implanon prevents pregnancy in a couple of ways:
 - ▣ The most important way is by stopping release of an egg from the ovary.
 - ▣ Implanon also changes the mucus in the cervix and this change may keep sperm from reaching the egg.

Insertion

- Insertion is a minor procedure that can be performed in a healthcare provider's office. The entire procedure is done using a local anesthetic and generally takes a few minutes.



Insertion



- Possible problems related to insertion:
 - Pain, irritation, swelling, or bruising
 - Scarring
 - Infection
 - Break in the implant, making it difficult to remove
 - Expulsion of the implant (occurs rarely)

- Problems with insertion occurred with 1% of women in clinical trials.

Insertion

- Insertion may be scheduled to coincide with the first few days of the menstrual cycle. Depending on when Implanon is placed, a back up method may be recommended for 7 days.

- Removal
 - ▣ The healthcare provider can remove Implanon at any time with a minor surgical procedure in the office. He or she will make a small incision in the arm and remove Implanon. A local anesthetic is used for the procedure.

Effectiveness



- % of Women Experiencing an Unintended Pregnancy within the First Year of Use:

- **0.05 (typical and perfect)**

- % of Women Continuing Use at One Year:

- **88**

Who can use Implanon?

- Remember not every method is right for every person. A woman shouldn't use Implanon if:
 - ▣ Are pregnant or think you may be pregnant
 - ▣ Have or have had serious blood clots, such as blood clots in your legs (deep venous thrombosis), lungs (pulmonary embolism), eyes (retinal thrombosis), heart (heart attack), or head (stroke)
 - ▣ Have unexplained vaginal bleeding
 - ▣ Have or have had breast cancer
 - ▣ Are allergic to anything in Implanon

Side Effects



- Changes in bleeding pattern (most commonly reported)
 - ▣ A woman can expect her menstrual periods to be irregular and unpredictable throughout the time she is using Implanon . A woman may have more bleeding, less bleeding, or no bleeding.
- Other possible side effects include mood swings, weight gain, headache, acne, and depression.

Weight Gain



- In clinical studies, mean weight gain in US Implanon users was 2.8 pounds after one year and 3.7 pounds after two years.
- How much of the weight gain was related to Implanon is unknown.

Possible Advantages

- Highly effective
- Efficacy does not depend on patient self administration
- Discreet
- Reversible
- Can be used back to back
- Based on a small study, Implanon may be used during lactation after the 4th postpartum week.
- Can be inserted immediately after a first trimester abortion

Possible Disadvantages



- Implanon may be less effective in women who are overweight.
- Does not protect against STIs, women should be counseled about STI risk reduction.

Implanon



- Key Messages:
 - Implanon is a highly effective and convenient method of contraception.
 - Implanon users should be counseled on the prevention of STIs.
 - Implanon provides long term protection against pregnancy yet is promptly reversible.

Questions?

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