How does an IUD work? Can it be used for emergency contraception? [1]

Dear Alice,

On the Planned Parenthood website, it indicates that the copper IUD can be used as emergency contraception if inserted within 5 days of unprotected sex, and that it is 99.9% effective as emergency contraception. I had never heard this before. The website also says that the IUD works by affecting the way that sperm move, and that there is no evidence that it works by preventing an embryo from implanting in the uterus. What if the egg meets the sperm in those five days?

Another IUD question. I understand that IUD's are associated with a small increase in risk of Pelvic Inflammatory Disease (PID), which can lead to infertility. I've heard you can have PID which goes symptom-free and undetected. What can a woman do to make sure she doesn't have PID after getting an IUD?

Thanks!

Answer

Dear Reader,

Contraception technology can certainly be complicated. This may be especially true if sex occurs when a contraceptive method fails or is not used. The copper IUD can in fact prevent pregnancy in "emergency" situations. The exact mechanisms are not fully understood, but the IUD may work by stopping sperm from reaching the egg or by changing the lining of the uterus to prevent a fertilized egg from attaching to the uterus wall.

To understand how a copper IUD can prevent a pregnancy within five days of unprotected sex, a little background info is needed. A common misperception is that conception happens right after sex. Sperm can actually live inside a woman for up to five days. They only cause pregnancy if an egg is available during that window of time, which is why preventing pregnancy is still possible following sex. After fertilization of an egg (which can occur between one and five days following sex), it takes another day or so for the egg to implant in the uterus. A pregnancy is not established until a fertilized egg is implanted in the lining of the uterus. All in all, the process of becoming pregnant doesn't happen overnight, which allows some wiggle room for preventing pregnancy through emergency contraception.
On to the IUD. The intra-uterine device is a T-shaped piece of plastic that has copper piping along the "T." It is inserted through the cervix and sits in the uterus to prevent pregnancy. A small amount of copper is released into the uterus immediately after insertion. Copper IUDs trigger anatomical and biochemical changes in the uterus, producing a toxic environment for incoming sperm. The copper IUD does not affect ovulation or the menstrual cycle; it immobilizes sperm travelling to the fallopian tubes, thereby preventing fertilization of an egg.

When inserted as emergency contraception after unprotected sex, copper IUDs may prevent pregnancy by changing the chemistry in the lining of the uterus so that it is not receptive to an egg.

Health care providers once believed that IUDs were linked to higher rates of pelvic inflammatory disease (PID), however this association has been refuted. If a woman has an infection like chlamydia or gonorrhea and has an IUD inserted, her risk for PID is increased. However, for women without any infections, the risk of PID is not related to IUD use. Your health care provider will test you for sexually transmitted infections before inserting an IUD to avoid any chance of a PID infection.

Using an IUD as emergency contraception involves a visit to your health care provider, which may be difficult to schedule in a time-sensitive situation. Other forms of emergency contraception (EC) are in the form of a safe and effective hormonal pill. One-pill formulations of EC, including Plan B One-Step and its generic versions, are available for sale on the retail shelves at many pharmacies and drugstores. For these formulations, no prescriptions are needed and proof-of-age is not required to purchase. For information on long-term birth control methods, Planned Parenthood [2] provides a comprehensive list of contraceptive options include advantages and disadvantages of each.

Whichever route you choose, know that all forms of emergency contraception are more effective the sooner they are used.

Take care,

Alice!

Category: Sexual & Reproductive Health [3]

Related questions

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