

Emergency Contraception

Unintended pregnancy is a global problem, which affects women, their family and society at large. Abortion is a frequent consequence. There are about 50 million pregnancies terminated each year. In US almost 50% pregnancies are unwanted.^[1]

As long as condoms tend to slip or diaphragms break and cervical caps tend to move out of place, pill users forget to take their tablets regularly, there will be need for use of emergency contraception. Other potential users are women who engage in an unprotected sexual activity either being forced (as in case of rapes) or coerced into having unplanned, unprotected intercourse protected intercourse can use emergency contraception. Almost every woman of reproductive age who is sexually active and fertile and wishes to prevent unintended pregnancy can use emergency contraception.

The Yuzpe regimen has been the most commonly used method. Yuppie regimen consist of 2 doses of a combination of 100 mcg of ethinyl estradiol and 500 mcg of levonorgestrel, the first dose taken within 72 hrs of intercourse and second dose 12 hrs later.^[2] The common side effects associated with this regimen are nausea and vomiting.^[3]

The levonorgestrel regimen an alternative regimen consists of 2 doses of 0.75mg levonorgestrel taken 12 hrs apart starting within 72 hrs of unprotected intercourse. A recent randomized, controlled trial by world health organization (WHO) has shown that this regimen was better tolerated and more effective than the Yuzpe regimen.^[4]

Another option; the copper bearing intrauterine device is highly effective post coital contraceptive with failure rate of less than 1%.^[5] It is used for 5 days after unprotected intercourse and is particularly appropriate for women who wish to use the device as a long term method of contraception.

Mifepristone (RU486) is highly effective as emergency contraception and regimen consist of a single dose of 600mg given within 72 hrs of unprotected intercourse. The WHO multicentre randomized trial to assess the safety and effectiveness of lower doses of mifepristone (50mg and 10mg) showed that reducing the dose did not decrease its efficacy and was associated with less disturbance of menstrual cycle.^[6]

Overall review of emergency contraceptive shows that relative acceptance of LNG is better than Cu T 200 B. When both LNG and Cu T were offered as emergency contraceptive agents using cafeteria approach, majority (76.47%) opted for LNG and only 23.53% who had come after 72 hrs but within 120hrs of intercourse opted for Cu T. Two subjects (0.57%) who had intercourse between 72 and 120 hrs refused Cu T, but were willing for LNG as EC which could not be provided to them as per the study. This indicates that majority of women do not like Cu T as EC though it will provide them continued contraception.

Reasons for Seeking EC

About 50% of women use EC because they had not used any contraceptive methods, while as 20.59% women use it due to breakage of condom; 7.35% due to displaced /expelled IUD. Only a few (17.65%) women need EC because they forgot to use condom.

Efficacy of EC

No failure of EC was observed with the use of LNG or Cu T 200 B. In 1997–1998 a study was carried out under WHO in which women from 14 countries had EC using YUZPE regimen or LNG, and the reported failure rate was 3.2 and 1.1% respectively. Fasoli *et al.* (1989) summarized 9 studies and reported that out of 879 women who accepted Copper containing IUD as the sole method of postcoital contraception only one pregnancy was noted.

Resumption of Menses after EC

Studies show that in 78.85% cases of LNG group and 81.25% cases of Cu T group, menses were resumed on time i.e., within 7 days of expected date of next menses while menses were delayed in 21.15% of LNG group and 18.75% of Cu T group.

Address for correspondence: Indu Kaul
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Side effects

Minimal side effects were observed with the use of LNG. Nausea was reported in 5.77% cases and no vomiting was reported. Abdominal pain was complained by 18.75% cases after Cu T use. Heavy bleeding was reported by 25% cases after use of Cu T as compared to 9.62% cases after use of LNG, while irregular bleeding was reported by 12.5% cases after C u T insertion as compared to 5.77% cases after LNG use; indicating that Cu T has more side effects in form of pain abdomen (not seen with LNG) and heavy and irregular bleeding (less with LNG).

EC has a definite place in preventing unwanted pregnancies in present day society as an emergency measure in cases of rape, incest, failure of barrier or natural contraceptive methods, and unprotected or unplanned intercourse. In community, LNG is preferred over Cu T. LNG has high acceptability with low side effects, while Cu T can be inserted at long interception period and provides contraception for longer period but may produce pelvic pain and menorrhagia^[7]

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Dr. Indu Kaul , MBBS, MD, MAMS

Professor

House No.1, Sector 1, Channi Himmat,

Jammu. 180015, Jammu & Kashmir, India.

Email: indukaulkhoda@gmail.com