

# Abstracts from current literature: Emergency contraception

Rahul Dixit, Y. S. Marfatia

Department of Skin VD, Government Medical College and SSG Hospital, Vadodara, India

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**Address for correspondence:**

Dr. Y. S. Marfatia, Department of Skin VD, Government Medical College and SSG Hospital, Vadodara, India. E-mail: ym11256@gmail.com

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**Emergency contraception: Update and review**

Langston A. Emergency contraception: Update and review. *Semin Reprod Med* 2010;28:95–102.

Emergency contraception (EC) is the postcoital method of pregnancy prevention. Three methods of EC are used in the United States: (1) levonorgestrel-only pills, (2) combined estrogen and progestin pills, and (3) the copper intrauterine device. Used within 120 h after unprotected sexual intercourse, EC reduces the risk of pregnancy by 60–94%. Levonorgestrel-only EC is available to women  $\geq 17$  years of age without a prescription. Women who were counseled by their clinician about EC were 11 times more likely to use EC in the following 12 months. Advance provision of EC to women has not been found to decrease rates of unintended pregnancy compared with routine pharmacy access; however, women routinely prefer advance provision. The newly approved by the Food and Drug Administration single-dose EC, Plan B One-Step may affect unintended pregnancy rates among EC users by simplifying use.

**Emergency contraception**

Dunn S, Guilbert E, Lefebvre G, Allaire C, Arneja J, Birch C, *et al.* Emergency contraception. *J Obstet Gynaecol Can* 2003;25:673–9.

*Objective:* This study was designed to review current knowledge about emergency contraception (EC), including available options, their modes of action, efficacy, safety, and the effective provision of EC within a practice setting. *Options:* The combined estradiol–levonorgestrel (Yuzpe regimen) and the levonorgestrel-only regimen, as well as post-coital copper intrauterine devices, are reviewed. *Outcomes:* Efficacy in terms of reduction in risk of pregnancy, safety, and side effects of methods

for EC and the effect of the means of access to EC on its appropriate use and the use of consistent contraception were discussed. *Evidence:* MEDLINE and the Cochrane Database were searched for English-language articles published from January 1998 through March 2003, to update the previous SOGC guidelines published in 2000. Clinical guidelines and position papers developed by health or family planning organizations were also reviewed. *Key words used:* emergency contraception, post-coital contraception, emergency contraceptive pills, postcoital copper IUD. *Values:* The studies reviewed were classified according to criteria described by the Canadian Task Force on the Periodic Health Exam, and the recommendations for practice were ranked based on this classification. *Benefits, Harms, and Costs:* These guidelines are intended to help reduce unintended pregnancies by increasing awareness and appropriate use of EC. *Recommendations:* (1) Women who have had unprotected intercourse and wish to prevent pregnancy should be offered hormonal EC up to 5 days after intercourse. (2) A copper IUD can be used up to 7 days after intercourse in women who have no contraindications. (3) Women should be advised that the levonorgestrel EC regimen is more effective and causes fewer side effects than the Yuzpe regimen. (4) Either 1 double dose of the levonorgestrel EC regimen (1.5 mg) or the regular 2-dose levonorgestrel regimen (0.75 mg each dose) may be used, as they have similar efficacy with no difference in side effects. (5) Hormonal EC should be started as soon as possible after unprotected sexual intercourse. (6) Women of reproductive age should be provided with a prescription for hormonal EC in advance of need. (7) The woman should be evaluated for pregnancy if menses have not begun within 21 days following EC treatment. (8) A pelvic examination is not indicated for the provision of hormonal EC. *Validation:* These guidelines have

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been reviewed by the Clinical Practice Gynaecology and Social and Sexual Issues Committees of the Society of Obstetricians and Gynaecologists of Canada. *Sponsor:* The Society of Obstetricians and Gynaecologists of Canada.

### **Barriers to emergency contraception (EC): Does promoting ec increase risk for contacting sexually transmitted infections, HIV/AIDS?**

Sarkar NN. Barriers to emergency contraception (EC): Does promoting EC increase risk for contacting sexually transmitted infections, HIV/AIDS? *Int J Clin Pract* 2008; 62:1769-75.

*Objective:* The aim of this study was to focus on barriers, controversy, and perceived risk associated with use of emergency contraception (EC) after unprotected sexual intercourse. *Materials and Methods:* Data were extracted from the literature of the MEDLINE database service. Original articles, surveys, clinical trials, and investigations are considered for this review. *Results:* After the introduction of over-the-counter and advance prescription provisions for easy access to EC, the rural-urban disparity in availability of EC poses a barrier to the use of EC for rural dwellers. The socio-economically weaker section of the population is unable to purchase EC because of low or no income, although there is mounting pressure by the State for prevention of unintended pregnancy by the use of EC. Some healthcare providers have objected to provide EC to the patient on the grounds of their conscience and morality. Some providers and users have also expressed concerns about the possibility of increase in irresponsible sexual behavior because of easy access to EC. There may be some truth in their apprehension because nearly 3.2 million unintended pregnancies occur annually despite various contraceptive options available in USA, and the extensive use of EC is directly proportional to the volume of unprotected sexual intercourse, which is too directly proportional to the quantum of risk for contacting sexually transmitted infections (STIs)/AIDS. *Conclusions:* Emergency contraception is a one-off postcoital procedure and not to be opted after every sexual intercourse. Controversy about EC may be resolved if it is used within this limit. Extensive use of EC may increase risk for contacting STIs/AIDS.

### **How safe is emergency contraception?**

Norris Turner A, Ellertson C. How safe is emergency contraception? *Drug Saf* 2002;25:695-706.

Emergency contraception is used to prevent

pregnancy after unprotected sex, but before pregnancy begins. Currently, women can use emergency contraception by taking higher doses of the active ingredients found in ordinary oral contraceptive pills [either combined estrogen-progestogen (progestin) or progestogen-only formulations], or by having providers insert copper-bearing intrauterine devices (IUDs). The antiprogestogen mifepristone also has an excellent efficacy and safety profile as emergency contraception, but it is currently available for this indication only in China. Many studies have documented providers' and women's fears about the individual and public health safety risks of emergency contraception. Some of these concerns include potentially increased risks of cardiovascular events (including arterial and venous disease), worries about possible effects on future fertility, feared teratogenic consequences following method failure or inadvertent use during pregnancy, exaggerated or extreme fears of adverse tolerability, and concerns about drug interactions with other medications. Wider public health questions include feared reductions in the use of ongoing, more effective contraception, possible "abuse" of emergency contraception through overly frequent use, and potential increases in risky sexual encounters (owing to the existence of a back-up, postcoital method) and therefore in rates of sexually transmitted infections, including HIV/AIDS. These fears can each be generally allayed. Direct and indirect investigations of emergency contraception in the biomedical and social science literature, the extensively documented safety profile of ordinary oral contraceptives, and more than 30 years of clinical experience since hormonal emergency contraception was first described, give strong evidence for its safety. This review confirms declarations by the World Health Organization and the US Food and Drug Administration, and shows that emergency contraception has an excellent safety profile in nearly all women. Finally, emergency contraception allows women a second chance to avoid unwanted pregnancies. Whether pregnancy is carried to term or terminated, the condition has inherent risks that are greater than any posed by emergency contraception.

### **Young women's perceptions of pregnancy risk and use of emergency contraception: Findings from a qualitative study.**

Williamson LM, Buston K, Sweeting H. *Contraception*. 2009 Dec; 80:591

*Background:* Advance provision of emergency

contraception (EC) has increased use but not impacted on pregnancy or abortion rates. Here we describe young women's EC use and experiences of unprotected sex to explore why this difference occurs. *Methods:* In-depth interviews with twenty 20-year-old women from eastern Scotland. *Results:* The majority (16) had used EC; 10 reported some experience of unprotected sex. EC use followed contraceptive failure and unexpected or unplanned, but not frequent, unprotected sex. Acknowledging the need for EC requires

recognition of pregnancy risk. Those reporting frequent unprotected sex misperceived their pregnancy risk and did not use EC. This group was from socially disadvantaged backgrounds, and all became pregnant. *Conclusions:* EC remains an important "backup" contraceptive and should continue to be widely available. With high levels of unprotected sex, nonuse of EC and unintended pregnancies, further efforts are required to improve the sexual and reproductive health outcomes of disadvantaged young women.

## **EDITORIAL COMMENT**

Emergency contraceptives are increasingly becoming the major mode of contraception among individuals. These pills are cheap, accessible, and available over the counter, but the convenience of buying and using them belies the health risk involved in their usage. In fact, some women say the i-pill is their primary mode of contraception. Now, they

are up against the mass advertising effort of the companies that manufacture the morning after pills. The ads, some experts say, use catchphrases such as "tension free" to appeal to young women and do not emphasize that the products are meant for the use in emergencies only. Every advertisement/the insert must explicitly highlight the fact that this does not offer any protection against STD/HIV.