

# Emergency contraceptive pill

*Managing risk associated with unprotected sexual intercourse*

This document is an independent statement about emergency contraception developed by the RACGP in collaboration with the Drug and Therapeutics Information Service (DATIS).

## Introduction

Emergency contraception can be described as the use of a device or drug to prevent pregnancy after unprotected sexual intercourse.<sup>1,2</sup>

It is estimated that almost 80 000 abortions are performed each year in Australia.<sup>3</sup> Unplanned pregnancy, which often results in abortion and is problematic around the world,<sup>4</sup> may be minimised by increasing awareness and appropriate use of emergency contraception among health care providers and women.<sup>5,7</sup>

When compared to the Netherlands (12 pregnancies per 1000 women under 20 years of age), Australia (43.7 pregnancies per 1000 women aged 15-19 years), the USA (83.6) and the UK (46.9 in England and Wales) have much higher teenage pregnancy rates.<sup>8</sup> Approximately half of Australian teenage pregnancies are terminated, which is one of the highest rates in the world.<sup>8,9</sup> The other half result in the child being parented by an adolescent, contributing to the estimated cost for single supporting parents in Australia of at least \$100 million per year.<sup>9</sup>

In the Netherlands, a low rate of unplanned pregnancies among teenagers has largely been attributed to accessible services, sexual and contraceptive education and media exposure to discussions on sexuality.<sup>10</sup> A strong positive role of the general practitioner facilitated the introduction of modern contraceptives in the Netherlands, with almost all family doctors providing family planning services by the end of the 1960s.<sup>10</sup> This initiative saw doctors accepting responsibility to help reduce unwanted pregnancies and consumers being able to access family planning services from someone

who was familiar, trusted and nearby.<sup>10</sup>

School based sex education has been found to increase the likelihood of contraceptive use at first intercourse.<sup>11</sup> A lower rate of pregnancy and sexually transmitted infections (STI), not increased sexual activity, is considered to be the result of sex education, with a higher age at first intercourse shown to be associated with increased education, particularly when school based.<sup>12,13</sup>

A recent Cochrane review<sup>2</sup> studied the outcome of 15 trials of different methods used for emergency contraception and found that levonorgestrel (750 mg given twice 12 hours apart) appeared to be more effective than the Yuzpe regimen (RR: 0.51; 95% CI=0.31-0.84) and produced statistically and clinically significantly less adverse events (RR: 0.80; 95% CI=0.76-0.84). The Yuzpe regimen<sup>14</sup> consists of 100 mg ethinylloestradiol and 0.5 mg levonorgestrel or 1 mg dl-norgestrel repeated twice 12 hours apart and given within 72 hours of unprotected intercourse.

The Cochrane review<sup>2</sup> concluded that effective interventions for emergency contraception are available and should be offered to all women requesting it. Further to this, it would appear prudent to discuss the availability of emergency postcoital contraception with all women when contraceptive methods are discussed at the clinic visit, with consideration given to prescribing it in advance.<sup>6,15,16</sup> In light of recent evidence, the preferred method should be two doses of levonorgestrel 750 mg given 12 hours apart, ideally commenced within 72 hours of unprotected intercourse because the efficacy of emergency contraception appears to be higher when taken within this time period.<sup>2,17</sup> All women and particu-

larly vulnerable groups such as teenage girls should be given this information.<sup>17</sup>

### Issues surrounding prescribing and use

It is essential that the interaction between the woman requesting emergency contraception and the GP is a positive experience. The emotional and physical needs of the patient can vary with age, past sexual experiences (if any) and prior interaction with health care professionals. The religious and moral beliefs of both the woman and the doctor are also important. The following information is provided to assist GPs in considering the issues involved before, during and after the visit, and to suggest ways to deal with such issues. Much of this information has been adapted from the research of Calabretto.<sup>16</sup>

- Some GPs may not be comfortable with the concept of emergency contraception for moral, religious and other reasons. It is essential that GPs provide a referral option for the patient.
- Respect the patient's sense of urgency.
- Avoid making assumptions and/or judgments about the patient and her behaviour. It is possible to underestimate the amount of stress the woman is experiencing. For example the sexual encounter may be associated with sexual assault, alcohol or other drugs. It is important to remember that the woman was only one of the parties involved in the sexual encounter.
- Avoid lecturing or 'talking down'. The language used by the doctor should be nonjudgmental.
- Consider issues faced by women from non-English speaking backgrounds including cultural differences.
- Respect the difficulties faced particularly by young women and disadvantaged women in the effort to reach the GP. For example arranging transport, money, organisation of appointments around school commitments, not wishing to discuss the issue with parents.
- The young patient may be concerned about confidentiality. It is important that the doctor reassures her that while it may be preferable if she would consider confiding in her parents or trusted adult, they will not be informed. Minors who are in a sexual relationship and/or require emergency contraception should be treated whenever possible, or advice from an adolescent health service should be sought.
- Consider mandated notification issues depending on the young patient's age when considered at risk.

- Discuss STI. The patient should be invited to return for testing. If the initial consultation is performed well, the patient is likely to come back for this follow up. Offer information about other sexual health services, youth health centres and STI services.
- Offer referral for additional support if needed. Try to identify other contributing issues eg. alcohol and other drugs, relationship issues, sexual assault etc.
- The best experience for the patient is one in which the doctor:
  - gently and systematically gathers the facts
  - explains emergency contraception and provides written information
  - discusses with the patient if she needs more information and/or a prescription for long term contraception ie. does not assume the patient is ignorant of the issues involved
  - is 'youth friendly' and nonjudgmental.
- A poor experience may result in the woman never again seeking emergency contraception.

### Practice points

- It is recommended that the ECP be discussed with all women when contraceptive methods are discussed.
- Consideration should be given to prescribing the ECP in advance, with a prescription for the ECP issued in conjunction with any prescription for contraception.
- Written materials should be supplied with any prescription for the ECP, to reinforce the GP's information. This is particularly important if the ECP is not going to be used immediately.

### Initial consultation

- Obtain history: unprotected intercourse within 72 hours of presentation?<sup>15</sup> There is some evidence to suggest that hormonal emergency contraception may be effective up to five days after unprotected intercourse.<sup>20</sup>
- Prior episode(s) of unprotected intercourse in same menstrual cycle?<sup>15</sup>
- Any contraindications to progestogen use?<sup>15</sup>
- Negative urine pregnancy test (if considered necessary from sexual history).<sup>15</sup>
- Check blood pressure. Elevated blood pressure is not a contraindication but requires further investigation.<sup>17</sup>
- If no symptoms of STI, delay pelvic examination until follow up.<sup>15</sup>

- Review with patient the efficacy, safety and instructions for use of the emergency contraceptive.
- Consider the cost. In order to make access easier for some young people with limited income, it is currently cheaper to prescribe the PBS listed progesterone-only oral contraceptive pill (Microval® or Microlut®) for two doses.

Additionally, these products can be supplied without identifying their use as an ECP. This may be important in small communities such as country towns. However, the requirement to show a current Medicare card and health care card (if applicable) to the pharmacist may be an issue for some women. Postinor-2® can be supplied via private prescription (~\$20-25), obviating the need for unique patient identification.

- Mention that although highly effective, the ECP is not 100% effective - if her period does not come within three weeks or is lighter than usual or the patient thinks she might be pregnant, or has abdominal pain or cramps, she needs to follow up with the GP.<sup>24</sup>
- Inform the patient that she needs to return to the GP if she vomits within two hours of taking a dose.<sup>17,24</sup>
- Assist the patient to work out the timing so that the second dose is not due during the middle of the night as the patient may not wake in time to take it and thus diminish efficacy.<sup>17,24</sup>
- Discuss side effects so the patient will understand what is happening (nausea, vomiting and less common side effects of breast pain, dizziness, tiredness, spot bleeding).<sup>15</sup> Side effects should be seen as evidence that the drug is working. If nausea associated with the first dose is severe, it is reasonable to take anti-nausea medication before taking the second dose.
- Stress ongoing contraception in that cycle (eg. condoms with or without oral contraceptive use or abstinence) as future unprotected sex in that cycle can result in pregnancy.<sup>7,16</sup> If the oral contraceptive pill is the method of choice, a new pack may be commenced the day after the second dose of the ECP has been given or on the first day of the next menstrual period.<sup>15</sup> Condom use should also be advised for the remainder of the cycle. If the woman is currently using the oral contraceptive pill but missed two or more doses and consequently uses the ECP, she may commence a new pack of her oral contraceptive pill the day after the second dose of an ECP is taken but condoms should also be used for seven days.<sup>15,16</sup> If Depo

Provera® is the contraceptive method of choice it can be given within five days of the next menstrual period or at the follow up visit (see below).<sup>15</sup> Diaphragm use should resume immediately. If Implanon® is to be used, it should be implanted within five days of the next menstrual period. However, it may be implanted mid-cycle if considered appropriate eg. if the woman is at high risk of pregnancy or is unlikely to be seen again. If the woman is interested in using an intra-uterine contraceptive device for ongoing contraception, it may be implanted in lieu of using the ECP, provided she has presented within five days of unprotected intercourse. Pregnancy should be excluded.

- Discuss long term contraception needs or encourage return to do so. If prescribing the oral contraceptive pill give clear instructions about when to commence so she will be covered from that time and arrange follow up to assess how the oral contraceptive pill is working for her.<sup>7,16</sup> Inform the patient that timing of periods often changes after the ECP. Menses may be on time, earlier or later than expected.<sup>15,16</sup>

### Follow up visit (2-3 weeks) if practical

- STI screening, discussion and clarification of ongoing contraception needs
- Pap smear may be indicated if the patient is older than 18 years or has been sexually active for two or more years<sup>15,16</sup>
- urine pregnancy test if menstruation has not commenced
- discuss referral to other agencies if necessary.

### Useful resources and websites

Emergency contraception website: <http://www.not-2-late.com>

This site provides useful and important information for prescribers and the public

Plan B™ (levonorgestrel tablets 750 mg) Women's Capital Corporation website:

<http://www.go2planb.com/>

Provides very useful product information for providers and patients

Child and Youth Health: <http://www.cyh.com/>

Useful information and resources with an emphasis on issues affecting young people

SHINE SA: <http://www.shinesa.org.au/>

Sexual Health Information Networking and Education, South Australia Inc

Provides comprehensive advice and information on sexual health issues

<http://www.healthysa.sa.gov.au>

Provides useful links for women's health services and resources around Australia and the world

Family Planning Queensland: [www.fpq.asn.au/](http://www.fpq.asn.au/)

Useful information including sexual health issues for young people

Women's Health Victoria: [www.whv.org.au](http://www.whv.org.au)

Extensive advice and information on women's health issues

[www.betterhealth.vic.gov.au](http://www.betterhealth.vic.gov.au)

Health related information

<http://www.fpahealth.org.au/>

Family planning topics

## References

1. Glasier A. Emergency postcoital contraception. *N Engl J Med* 1997; 337(15):1058-1064.
2. Cheng L, Gulmezoglu A M, Excurra E, Van Look P F A. Interventions for emergency contraception. *Cochrane Database of Systematic Reviews*, 2002; 1.
3. National Health and Medical Research Council. An information paper on termination of pregnancy in Australia. Canberra: Australian Government Printing Service, 1996.
4. Falk G, Falk L, Hanson U, Milsom I. Young women requesting emergency contraception are, despite contraceptive counseling, a high risk group for new unintended pregnancies. *Contraception* 2001; 64:23-27.
5. Gainer E, Mery C, Ulmann A. Levonorgestrel only emergency contraception: real-world tolerance and efficacy. *Contraception* 2001; 64:17-21.
6. Weisberg E, Fraser I S, Carrick S E, Wilde F M. Emergency contraception: general practitioner knowledge, attitudes and practices in New South Wales. *Med J Aust* 1995; 162:135-138.
7. Australian Medicines Handbook Pty Ltd. Adelaide South Australia: Australian Medicines Handbook, 2002.
8. Singh S, Darroch E. Adolescent pregnancy and childbearing: levels and trends in developed countries. *Fam Plann Perspect* 2000; 32(1):14-23.
9. Condon J T, Corkindale C J. Teenage pregnancy: trends and consequences. *Curr Ther* 2002; 43(3):25-31.
10. Ketting E, Visser A P. Contraception in the Netherlands: the low abortion rate explained. *Patient Educ Couns* 1994; 23(3):161-171.
11. Wellings K, Wadsworth J, Johnson AM, Field J, Whitaker L, Field B. Provision of sex education and early sexual experience: the relation examined. *Br Med J* 1995; 311(7002):417-420.
12. Anonymous. Sex education in schools: peers to the rescue? (Editorial). *Lancet* 1994; 344(8927):899(892).
13. Dean M. Muddle over sex education. *Lancet* 1994; 343(8906):1149.
14. Yuzpe A A, Lancee W J. Ethinylestradiol and dlnorgestrel as a postcoital contraceptive. *Fertil Steril* 1977; 28(9):932-936.
15. Gold M A. Emergency contraception. *Adv Pediatr* 2000; 47:309-334.
16. Calabretto H E. Emergency contraception knowledge, attitudes and experiences of young women. [PhD thesis]. Adelaide: Faculty of Health Sciences, School of Nursing and Midwifery, Flinders University, 2002.
17. Schering. Postinor-2. Product Information. 2002.
18. Task Force on Postovulatory Methods of Fertility Regulation. Randomised controlled trial of levonorgestrel versus the Yuzpe regimen of combined oral contraceptives for emergency contraception. *Lancet* 1998; 352:428-433.
19. Ho P C, Kwan M S W. A prospective randomized comparison of levonorgestrel with the Yuzpe regimen in postcoital contraception. *Hum Reprod* 1993; 8(3):389-392.
20. Rodrigues I, Grou F, Joly J. Effectiveness of emergency contraceptive pills between 72 and 120 hours after unprotected sexual intercourse. *Am J Obstet Gynecol* 2001; 184:531-537.
21. Wilcox A J, Dunson D B, Weinberg C R, Trussell J, Baird D D. Likelihood of conception with a single act of intercourse: providing benchmark rates for assessment of postcoital contraceptives. *Contraception* 2001; 63:211-215.
22. Grimes D A. Emergency contraception expanding opportunities for primary prevention. *N Engl J Med* 1997; 337(15):1077-1079.
23. Hapangama D, Glasier A F, Baird D T. The effects of peri-ovulatory administration of levonorgestrel on the menstrual cycle. *Contraception* 2001; 63:123-129.
24. Sexual Health Information Networking and Education South Australia Inc (SHINE SA). Emergency contraceptive pills (ECPs). 2001.
25. Tremblay D, Gainer E, Ulmann A. The pharmacokinetics of 750 micrograms levonorgestrel following administration of one single dose or two doses at 12- or 24-h interval. *Contraception* 2001; 64(6):327-331.
26. Princeton University Office of Population Research, Association of Reproductive Health Professionals. The emergency contraception website: [www.not-2-late.com](http://www.not-2-late.com) Accessed 9/4/02. [www.not-2-late.com](http://www.not-2-late.com) Accessed 9/4/02.
27. Program for Appropriate Technology in Health. Plan B(tm) (levonorgestrel) tablets 0.75mg. <http://www.go2planb.com/> Accessed 10/4/02.
28. Crawford P, Chadwick C M, Martin C, Tjia J, Back D J, Orme M. The interaction of phenytoin and carbamazepine with combined oral contraceptive steroids. *Br J Clin Pharmacol* 1990; 30:892-896.
29. Royal Pharmaceutical Society of Great Britain. Practice guidance on the supply of emergency hormonal contraception as a pharmacy medicine. <http://www.rpsgb.org.uk/> Accessed 12/4/02.
30. Stockley I H. Drug Interactions. 5th edn. London: Pharmaceutical Press, 1999.
31. Shane-McWhorter L, Cerveny J D, MacFarlane L L, Osborn C. Enhanced metabolism of levonorgestrel during phenobarbital treatment and resultant pregnancy. *Pharmacotherapy* 1998; 18(6):1360-1364.
32. Breckenridge A. Important interactions between St John's wort (*hypericum perforatum*) preparations and prescribed medicines. Letter from chairman, Committee on Safety of Medicines. Royal Pharmaceutical Society of Great Britain. <http://www.rpsgb.org.uk/> Accessed 12/4/02.
33. Ellison J, Thomson A J, Greer I A, Walker I D. Apparent interaction between warfarin and levonorgestrel used for emergency contraception. *Br Med J* 2000; 321(7273):1382.
34. Gardner J S, Fuller T S, Hutchings J. The effects of self administering emergency contraception. *N Engl J Med* 1998; 339(19):1395.

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Copies of the complete Statement on Emergency Contraception are available on the college website <http://www.racgp.org.au> or by contacting Ozlem Hassan at the RACGP on 03 9214 1497.