

Emergency Contraception

Definition is any method of contraception which is used after intercourse and before the potential time of implantation. As these methods work before implantation they are not abortifacients.

Emergency contraception [EC] is a backup method for occasional use, and should not be used as a regular method of birth control.

Also known as Morning-After Pills, Postcoital Contraception, Secondary Contraception.

Forms of EC

- Hormonal EC
- post-coital intra uterine devices IUDs

Two hormonal preparations are available:

1. One contains only the progestin levonorgestrel.
2. Combined preparation containing both ethinyl estradiol and levonorgestrel.



1. **The levonorgestrel-only method** The regimen consists of [2 doses of 750 µg levonorgestrel taken orally 12 hours apart].

This method prevents

- 95% of pregnancies when used within 24 hours of intercourse,
- 85% when used 25 to 48 hours after intercourse, and
- 58% when used 49 to 72 hours after intercourse.

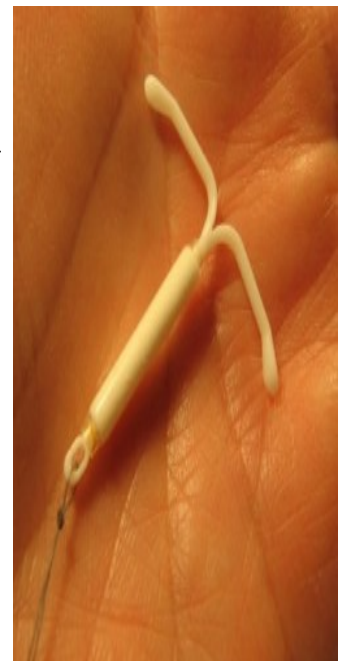


Inside this issue:

- Emergency Contraception .
- Withdrawal of corticosteroids.

Special points of interest:

- * Definition of EC.
- * Forms of EC.
- * Effectiveness of EC.
- * Side effects.
- * Contraindications .



Intra uterine devices

2. Combined preparation

- **Yuzpe method** in use since the 1970s, it consists of the oral administration of 2 doses of 100 µg ethinyl estradiol (EE) and 500 µg levonorgestrel 12 hours apart.
- **Ovral tablets** (each containing 50 µg ethinyl estradiol and 250 µg levonorgestrel) are most commonly used to provide these doses.

Although they have generally been used only up to 72 hours after intercourse, both hormonal methods of EC are effective when taken between 72 and 120 hours after unprotected intercourse. The effectiveness when used after 72 hours seems to be slightly lower .

A post-coital IUD insertion can be considered up to 7 days after unprotected intercourse.

A meta-analysis has demonstrated that the effectiveness of post-coital IUDs approaches 100%, significantly higher than the effectiveness of hormonal EC .

Levonorgestrel-only EC is available over-the counter. trade names is Plan B, Levonelle , Postinor , Contraplan II

EC indications

1. woman was raped
2. Failure to use a contraceptive method.
3. Two or more missed birth control pills.
4. Condom breakage or leakage.
5. Dislodgement of a diaphragm or cervical cap.

6. three-month contraceptive injection was missed by more than two weeks .

7. one-month contraceptive injection was missed by more than three days .

8. An IUD was partially or totally expelled.

CONTRAINDICATIONS

The only absolute contraindication to the use of emergency hormonal contraception is known pregnancy .

SIDE EFFECTS

The common side effects of hormonal emergency contraception are gastrointestinal. The levonorgestrel method has a significantly lower incidence than the Yuzpe method, of:

1. Nausea (23% versus 50%).
2. Vomiting (5% versus 18%).
3. Dizziness, fatigue., headache, bloating, abdominal cramps, and spotting or bleeding .
4. Most women will have menstrual bleeding within 3 weeks of taking ECPs.

The common side effects of post-coital IUD insertion include : Pelvic pain , Pelvic infection , Abnormal bleeding , Expulsion .

DID YOU KNOW

53% of the women with unplanned pregnancies were using contraception

References

1. **S.O.G.C. CLINICAL PRACTICE GUIDELINES .**

Withdrawal of corticosteroids

The use of pharmacological doses of corticosteroids suppresses the endogenous secretion of it by the anterior pituitary with the result that the adrenal cortex becomes atrophied. Sudden withdrawal or reduction in dose or an increase in corticosteroid requirements associated with the stress of infection or accidental or surgical trauma may precipitate acute adrenocortical insufficiency, deaths have followed the abrupt withdrawal of corticosteroids.

In some instances withdrawal symptoms may involve or resemble relapse of the disease for which patient has been undergoing treatment.

Other effects that may occur during withdrawal or change of corticosteroid therapy include benign intracranial hypertension with headache and vomiting and papilloedema, latent rhinitis or eczema may be unmasked.

Duration of treatment and dosage are important factors in determining suppression of the pituitary adrenal response to stress on cessation of corticosteroid treatment.

Following short courses at moderate doses it may be appropriate to withdraw corticosteroids without tapering the dose. However after high dose or prolonged therapy withdrawal should be gradual, the rate depending upon the individual patient's response, the dose, the disease being treated and the duration of therapy.

Recommendations for initial reduction stated in terms of prednisolone have varied from 1mg monthly to 2.5 to 5mg every 2 to 7 days.

Corticosteroid Drug	Treatment for	Molecular formula
Betamethasone	Dermatitis	C ₂₂ H ₂₈ FO ₅
Budesonide	Asthma, noninfectious rhinitis, nasal polyposis	C ₂₅ H ₃₄ O ₆
Cortisone	IgE-mediated allergies	C ₂₁ H ₂₈ O ₅
Dexamethasone	Inflammation, rheumatoid arthritis	C ₂₂ H ₂₉ FO ₅
Hydrocortisone	Dermatitis	C ₂₁ H ₃₀ O ₅
Methylprednisolone	Arthritis, Bronchial inflammation	C ₂₂ H ₃₀ O ₅
Prednisolone	Asthma, rheumatoid arthritis, ulcerative colitis, Crohn's disease	C ₂₁ H ₂₈ O ₅
Prednisone	Systemic lupus erythematosus, Bell's palsy, asthma, dermatitis	C ₂₁ H ₂₈ O ₅
Triamcinolone	Eczema, diabetic retinopathy	C ₂₁ H ₂₇ FO ₅

Provided the disease is unlikely to relapse the dose of systemic corticosteroids may be reduced rapidly to physiological values dose reduction should be slower to allow recovery of pituitary adrenal function.

Symptoms attributable to over rapid withdrawal should be countered by resuming a higher dose and continuing the reduction at a slower rate. The administration of corticotrophin does not help to re-establish adrenal responsiveness.

This gradual withdrawal of corticosteroid therapy permits a return of adrenal function adequate for daily needs but years may sometimes be required for the return of function necessary to meet the stress of infection, surgical operations, or trauma. On such occasions patients with a history of recent corticosteroid withdrawal should be protected by means of supplementary corticosteroid therapy.

Schedule for tapering steroids

If patients has been on :

- High dose therapy for < 7days .no taper is needed.
- High dose for 7-10 days rapid taper of 25% dose reduction / day prudent [i.e. 4 days to baseline].
- High doses therapy for > 10 days slower taper 10 – 15% dose reduction / day until at desired dose.

References

1. Martindale thirty-second edition published 1999, volume I.

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