Emergency Contraception
What’s New?

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Technical Instruction
Emergency Contraception

- Using a drug or device as an emergency method to prevent pregnancy after unprotected intercourse.
- A back up for occasional use rather than a regular contraception.
Emergency Contraception

- **Hormonal methods**
  - **Yuzpe:**
    - EE (100 µg) + LNG (0.5 mg) repeated 12h later
  - **Levonorgestrel**
    - 1.5 mg single dose
    - 0.75 mg repeated 12h later
  - **Mifepristone**
    - Single dose of 10 or 25 mg

- **Copper-IUDs**
  - TCu 380A
  - MLCu 375
  - GyneFix
Cochrane Review

Title: Interventions for emergency contraception

Authors: Cheng L, Gülmezoglu AM, Van Oel CJ, Piaggio G, Ezcurra E, Van Look PFA

First publish 1998

Update 2004

Update 2008

Interventions for emergency contraception (Cochrane review)

- included eighty-one trials
- total of 45,842 women
- to determine which emergency contraceptive method following unprotected intercourse is the most effective, safe and convenient to prevent pregnancy.
IUD VS EXPECTANT MANAGEMENT

- **Askalani 1987**

  Compared Cu-T 200 insertion with expectant management in women requesting EC within 4 days of unprotected intercourse. There was a significantly higher number of pregnancies in the expectant management group (RR: 0.09, 95% CI 0.03 to 0.26).
IUD Long-term Use after EC

  - Three month 95.23%
    - 1 preg / 1535 women at the 2nd month
    - pregnancy rate: 0.06 /per 100 women-year
  - One year 92.85%
    - 1 preg / 1481 women at the 8th month
    - pregnancy rate: 0.13 /per 100 women-year

- **Zhou et al (2001)**
  - 95.7% parous and 80.0% nulliparous

- **D’Souza et al (2003)**
  - 81.0% continuation of IUD use
LNG vs Yuzpe for emergency contraception

- Two trials
- 2878 women

Conclusion:

- LNG more effective (RR: 0.51, 95% CI: 0.31 to 0.83)
- LNG better tolerated
- the earlier treatment, the more effective
LNG different methods

- **Split-dose 24hr vs 12hr regimen**
  - one trial
  - 2060 women
  - efficacy was similar with either regimen
    - (RR: 0.98; 95% CI: 0.53 to 1.82)

- **Single dose vs split-dose regimen**
  - two trials
  - 3830 women
  - efficacy was similar with either regimen
    - (RR: 0.77, 95% CI: 0.45 to 1.30)
**LNG vs Mifepristone**

- **LNG vs Mife mid-dose (25-50mg)**
  - fifteen trials (all conducted in China)
  - 3748 women
  - Mife was more effective (RR: 2.01; 95% CI: 1.27 to 3.17) and better tolerated

- **LNG vs low-dose Mife (< 25mg)**
  - nine trials
  - 8036 women
  - Mife was more effective? (RR: 1.43; 95% CI: 1.02 to 2.01)
  - (RR: 1.42; 95% CI: 0.99 to 2.03)
Mifepristone dose comparisons

- Forty-nine trials
  - compared high vs mid vs low dose of Mife
- The efficacy was similar
- Menstrual delay related with Mife dosage
LNG vs CDB-2914

- **Creinin 2006** compared LNG split-dose regimen with CDB-2914 50 mg single-dose orally within 72 hours after unprotected intercourse.

- The pregnancy rate was higher with LNG (RR: 1.86; 95% CI 0.75 to 4.64) but with wide confidence interval compatible with either direction of effect.
LNG vs CDB-2914

- LNG had earlier menses compared with CDB-2914 (RR: 2.06; 95% CI: 1.71 to 2.47)
- CDB-2914 had later menses compared with LNG (RR: 0.64; 95% CI: 0.52 to 0.78)
MIFEPRISTONE vs YUZPE

- Three trials conducted in the UK
- 2144 women
- Mife better prevented pregnancies than the Yuzpe ($RR: 0.14, 95\% CI: 0.05 to 0.41$)
- Mife better tolerated
- The delay in menses was significantly more often reported by women receiving mifepristone as compared to those who used the Yuzpe regimen.
Conclusion

- Mifepristone middle dose (25-50 mg) was superior to other hormonal regimens.
- Mifepristone low dose (<25 mg) could be more effective than levonorgestrel 0.75 mg (two doses) but this was not conclusive.
- Levonorgestrel proved more effective than the Yuzpe regimen.
- The copper IUD was another effective emergency contraceptive that can provide ongoing contraception.
Key Points of Counseling for ECPs

- Do not cause abortion
- The earlier ECPs are taken, the higher efficacy
- Repeat dose after vomiting
- Do not protect the rest of the cycle
- Do not prevent STIs
- Menses do not start immediately, but may start 2 to 3 days earlier or later than expected.
- Do not harm a pregnancy
- EC is not a regular method, must use regular methods after EC
Regular Contraception after EC

- Start immediately:
  - barrier methods
  - oral contraceptives*
  - progestin-only injectables*

* Some providers recommend waiting until next menses to start

- Wait for next menses:
  - IUD
  - implants
Thank you!