# **Emergency Contraception** What's New?

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## **Emergency Contraception**

Solution 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
- - 1.5 mg single dose
  - 0.75 mg repeated 12h later
- **Mifepristone** 
  - Single dose of 10 or 25 mg

- Copper-IUDs

  - №
     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 № 2004 update **≈ 2008** update Cochrane Database of Systematic Reviews 2008, Issue 2. Art. No.: CD001324. DOI: 10.1002/14651858.CD001324.pub3.

**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**

#### Wu et al (2000)

I preg / 1535 women at the 2nd month pregnancy rate: 0.06 /per 100 women-year I preg / 1481 women at the 8th month pregnancy rate: 0.13 /per 100 women-year A Zhou et al (2001)
 A № 95.7% parous and 80.0% nulliparous D'Souza et al (2003) 

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

- ca one trial
- № 2060 women

(RR: 0.98; 95% CI: 0.53 to 1.82)

- Single dose vs split-dose regimen

(RR: 0.77, 95% CI: 0.45 to 1.30)

**LNG vs Mifepristone** LNG vs Mife mid-dose (25-50mg) CR Mife was more effective (RR: 2.01; 95% CI: 1.27 to 3.17) and better tolerated LNG vs low-dose Mife (< 25mg)</p> 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
  - ca 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

or progestin-only injectables\*

\* Some providers recommend waiting until next menses to start

- Wait for next menses:
  - ন্থ IUD

# Thank you !