

Session 1. Issues in Contraception

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Until recently no examination of evidence for management of many common contraceptive issues had been undertaken. In 2002 WHO set up expert panel to examine the evidence and provide clinical guidance for contraceptive usage. Two Guidelines have been published and will be updated as new evidence becomes available.

Guidelines are available on WHO Website:

http://www.who.int/reproductive-health/publications/rhr_02_7/index.htm

http://www.who.int/reproductive-health/publications/MEC_3/index.htm

Starting COC

- First 5 days of menstrual cycle – no additional protection required
- Can start at any other time in cycle provided pregnancy is excluded - need 7 days of additional protection

Rationale:

- Risk of ovulation in first 5 days of cycle negligible
- Waiting for next cycle to start COC may result in some unintended pregnancies
- Need 7 days to reliably suppress ovulation later in cycle

WHO Clinical practice Guidelines
Wilcox et al BMJ 2001 63:211-15
Westoff et al Contraception 2002 66:141-5

Missed pills (30-35µg EE)

- Missed 1 or 2 active pills or starts a pack 1-2 days late take as soon as possible and continue daily pill use – no additional protection required
- Missed 3 or more active pills take as soon as possible and continue daily pill use – additional protection required for 7 days
- Missed 3 or more active pills in third week of pack skip pill free interval and continue active pills in next pack using additional protection for 7 days

Creinin et al Contraception 2002 66:147-152
WHO Clinical practice Guidelines

Missed pills (20µg EE)

- Missed 1 active pill or starts a pack 1 day late take as soon as possible and continue daily pill use – no additional protection required
- Missed 2 or more active pills take as soon as possible and continue daily pill use – additional protection required for 7 days
- Missed 2 or more active pills in third week of pack skip pill free interval and continue active pills in next pack using additional protection for 7 days

Crenin et al Contraception 2002 66:147-152
Letterie Contraception 1998 57: 39-44
WHO Clinical practice Guidelines

Missed pills (POP 1 or more)

- Breast feeding, less than six months post-partum, amenorrhoeic take as soon as possible and continue daily pill taking – no additional contraception required

Rationale:

- Breast feeding gives additional protection

McCann et Potter Contraception 1994 50 (6 Suppl.. 1):S1-195
WHO Clinical practice Guidelines

Missed pills (POP 1 or more)

- Menstruating take as soon as possible and continue daily pill taking –additional contraception required for 2 days

Rationale

- Two days necessary to re-establish cervical mucus protective effect

McCann, Potter Contraception 1994 50 (6 Suppl. 1):S1-195
WHO Clinical practice Guidelines

Absolute risk of VTE

- Non COC users 5/100,000WY
- COCs LNG, NET 3-fold increase 15/100,000WY
- COCs Gest, DSG 5-fold increase 25/100,000WY
- Pregnancy 12-fold increase 60/100,000WY
- Mortality due to VTE 5/million/yr
- Mortality is not increased in COC users

RCOG evidenced based Guidelines

Recommendations for COC use WHO medical eligibility criteria

- COCs contraindicated in women with a personal history of VTE
- COCs contraindicated in women < 21 days postpartum
- Prolonged immobilisation
- COCs contraindicated in women with known thrombophilias
- Varicose veins and superficial thrombo phlebitis are not contraindications

WHO Medical Eligibility Guidelines

Recommendations for POC use WHO medical eligibility criteria

- Benefits outweigh risks for women with risk factors for VTE apart from current venous thrombo-embolic disease

Choice of COC in new starters

- Risk of VTE not dependant on dose of EE if less than 50µg
- Levonorgestrel or norethisterone containing pills should be pills of first choice
- Other progestogen containing pills can be prescribed providing the woman is counseled about VTE
- VTE risk increases in first 4 months of use and decreases with longer duration of use
- VTE risk returns to that of non-users within 3 months

Evidence-based recommendations of RCOG OCTOBER 2004

Vomiting and hormonal contraception

- If vomiting occurs within 2 hours of taking any oral hormonal contraceptive including ECP repeat the dose
- Severe diarrhoea or vomiting for more than 24 hrs try and continue taking
- If continues for 2 or more days follow procedure for missed pills.

WHO Clinical practice Guidelines

Switching to COC from other method

- Not pregnant, has used hormonal method correctly immediate change to COC- no need to wait for period- no other method required
- Using DMPA can start COC when next injection due
- Using IUD start within first 5 days of cycle and IUD can be removed at this time (applies to copper and LNG device)
- Can start COC at any other time in cycle but if after first 5 days of cycle and has had intercourse in that cycle leave IUD in situ until start of next period -preferable
- Alternatively IUD can be removed but must use alternative protection for 7 days.

WHO Clinical practice Guidelines

COC use in women with migraine

- Migraine with aura (focal migraine) is an absolute contraindication
- Risk of ischaemic stroke increases with age
- 23/100,000 women per yr aged 25-29
- 139/100,000 women per yr aged 40-45
- Additional risk factors smoking, hypertension, obesity
- Consider other contraceptive options in women >35yrs who have other risk factors and migraine without aura
- Severe migraines lasting > 72 hrs –contraindication
- Migraine treated with ergot derivatives – contraindication

Breakthrough bleeding on the pill

- Check missed pills
- Enzyme-inducing drugs
- If erratic exclude underlying pathology including chlamydia
- Common first 1-2 cycles –reassure
- If continues either increase oestrogen dose or change progestogen – gestodene appears to give better cycle control
- If occurs at same time in cycle and starts after 12-18 months of regular bleeding-increase oestrogen

Emergency contraception

- Ideal therapy is 1.5mg levonorgestrel in a single dose taken within 72 hrs of unprotected intercourse
- Still have some effect up to 120hrs after intercourse but effectiveness reduces with time elapsing after unprotected intercourse
- No data on effectiveness after 120 hours

Von Hertzen et al Lancet 2002 360:1803-10

Emergency contraception in women using hormonal contraceptives

- Only required if pill free interval is extended or pills are missed in the first pill taking week and unprotected intercourse has occurred in that first week.
- DMPA injection delayed by more than 14 days and unprotected intercourse has occurred after the 14 days.

The IUD as emergency contraception

- Mirena cannot be used for emergency contraception
- Copper IUD can be inserted within 5 days of unprotected intercourse or later as long as it is certain it is not more than 5 days after ovulation
- Timing of IUD insertion
- Mirena – first 7 days of cycle – no additional protection required
- Mirena insert at any other time if certain woman is not pregnant but additional protection required for 7 Days
- Copper IUDs in first 12 days of cycle preferably but at any time of cycle if pregnancy can be definitely ruled out – no additional protection required

WHO Clinical practice Guidelines

Switching to IUD from another method

- Copper IUD insert at any time of cycle if certain woman is not pregnant – no additional protection necessary
- LNG IUS insert at any time of cycle if certain woman is not pregnant but additional contraception required if more than 7 days since start of period
- If changing from DMPA insert LNG IUS at time next injection due – no alternative protection necessary

WHO Clinical practice Guidelines

PID management with a copper IUD or Mirena

- Treat with appropriate antibiotics
- If wishes to continue with IUD use no need to remove IUD
- If wishes to discontinue IUD use –remove after antibiotic treatment is established
- If IUD is removed and intercourse has occurred consider use of ECP
- Comprehensive management for STIs and counselling about condom use

WHO Clinical practice Guidelines

Bleeding problems with IUDs

- Spotting and intermenstrual bleeding common during first 3-6 months
- Heavier and more prolonged bleeding use NSAIDs or tranexamic acid during the bleeding episode.
- Bleeding lessens usually with increased duration of use
- If using a copper IUD change to Mirena if bleeding continues to be problematic
- Mirena bleeding problems usually settle within 6 months of insertion

WHO Clinical practice Guidelines

Pregnancy with Mirena in situ

- Exclude ectopic pregnancy
- Inform about risks of first and second trimester miscarriage (including life threatening septic abortion) and premature delivery
- String visible – remove IUD
- String not visible – ultrasound to locate – may have been expelled
- Effects on foetal development of LNG exposure in utero – unknown
- Discuss possibility of termination of pregnancy
- If continues pregnancy with Mirena in situ warn to return immediately if heavy bleeding, cramping, pain abnormal discharge or fever occurs

Management of bleeding with Implanon

- No good data
- Data derives from Norplant which does not inhibit ovulation to the same extent as Implanon
- A number of treatments will stop an episode of bleeding but have no effect on subsequent bleeding patterns
- Need to give repeat treatments but no cumulative effect on bleeding patterns

Treatment for progestogen –only bleeding problems

- If heavy or prolonged bleeding occurs after a period of amenorrhoea exclude an underlying gynaecological problem
- NSAIDs- Ibuprofen 800mg tds for 10 days or mefenamic acid
- Do not use aspirin
- Combined low dose pill for 21 days – unless oestrogens contraindicated
- Ethinyl oestradiol – now unavailable
- Mifepristone (RU 486) 50mg – unavailable in Australia

DMPA use and bone density

- DMPA use appears to be associated with bone loss in adult women – up to 6% over 2 years
- DMPA associated bone loss in adolescent women may reduce peak bone mass
- Bone loss appears to be partially or fully reversible
- BMDA users have a lower oestradiol level
- Evidence on the effectiveness of concurrent oestrogen therapy is limited and inconsistent

DMPA use

- DMPA is not a first line contraceptive method for teenage women

- Women need to be informed about DMPA effect on bone
- Need to assess risk factors for osteopaenia
- Need to inform women about dietary calcium and exercise, smoking etc
- Need to balance contraceptive benefits against risk for the individual woman

Edith Weisberg has responded to questions from the audience on:

- Is there any evidence of **osteopenia associated with Implanon or Mirena?**

No evidence with Implanon as the majority of women have little or no ovarian suppression of their oestradiol levels (as opposed to DMPA). Serum oestradiol levels are reasonably normal in Mirena so wouldn't expect any adverse impact.

- Is there any studies looking at **use of Oestrogen only** in women with **problem bleeding and Implanon?**

One study used transdermal oestrogen (ie oestradiol) with no effect. Oestradiol & Premarin are much weaker oestrogens than ethynyl oestradiol.

- How do you manage **irregular break through bleeding** in young women who are taking **continuous COCP** to suppress cycle (for endometriosis)?

A 7 Day break usually stops bleeding. The longer a woman is on continuous COC, the fewer BTBs occur. I find Brevinor 1 continuous the best for reducing incidence of BTB as norethisterone has a more potent effect on endometrium than other progestogens. BTB does not indicate lower efficacy unless taking enzyme-inducing drugs such as older anticonvulsants.

- Is there a need for increased dose of **Implanon if obese?**

No need with Depo Provera, but Implanon may lose efficacy earlier

- Is there a need to be **performing BMD scans with depo provera?**

Only if there is a risk factor for osteopenia eg, corticosteroids, thyroid disease etc.

- If OCP started other than in **first 5 days of cycle**, do you have more problems with **BTB?**

It appears that starting later than day 1 reduces BTB incidence & increases continuation rate.

- Does **BTB** on OCP confer **increase risk of pregnancy?**

BTB is an indication of progestogen effect on endometrium and does not indicate loss of efficacy. The only time it is an indicator of possible loss of efficacy is in women taking enzyme inducing drugs eg older anticonvulsants or rifampicin.

- If **>2 missed 20ug pills midcycle** is that ok or barrier contraception for 7 days?

Probably ok, but no data.

- Comment on **smoking and COCP**

Smoking increases risk of CAD by effects on platelet aggregation. COC can have a similar effect. Using the two multiplies the risk rather than increasing the risk additively. Smoking is only a concern in women > 35 years as under this age the attributable risk is low due to the low incidence of CAD in young women.

- What is the current thinking on **antibiotic use and OCP** efficacy?

Except for enzyme inducers (like rifampicin) there is no good evidence that antibiotics affect pill efficacy. The original data were anecdotal. Comparative trials between OCP users who take antibiotics & those who don't show no difference in pregnancy rates. Blood studies of oestrogen & progestogen levels show no difference or evidence of ovulation or differing degrees of follicular activity.

- If **removing Implanon** & woman has had sex in the last 5 days, is it reasonable to still take it out & use the OCP for 7 days?

It takes an average four weeks for return of fertility after Implanon removal – so generally unnecessary. Only concern would be if the woman started to have regular normal menses, which could be an indication of return of cycle.

- Use of **Implanon when Factor V Leiden positive** (heterozygous) (no Hx of VTE)
No Problems.

- Is it best to give **Postinor between 25-48 hours** after unprotected intercourse given the figures?
No because difference is not statistically significant.

- When using **Postinor for missed pill** can you continue with COC or do you start at next cycle?
Can start COC day after taking Postinor. Only need Postinor if in 1st week of pill taking cycle.