Emergency contraception

Tues 4th November 2014
Engineers House
Cindy Farmer

Learning objectives
• Describe the 3 different methods of EC available in the UK
• Evaluate the most appropriate method of EC
• Quickstart ongoing contraception after oral EC

Abbreviations used
• UPSI = unprotected sexual intercourse
• LMP = last menstrual period
• EC = emergency contraception
• EHC = emergency hormonal contraception
• IUD = intra-uterine device
• LNG = levonorgestrel
• UPA = ulipristal
• UKMEC = UK Medical eligibility criteria

Sophie
• Sophie, 19, presents asking for emergency contraception.
• What do you need to know?

What do you need to know?
• When did she have unprotected sex?
• Have there been any other episodes of UPSI?
• When was her LMP?

The answer to these questions will help you decide which form of EC is most appropriate

Where are we now with EC?
• Copper IUD – ALWAYS the most effective
• Levonorgestrel(LNG) 1500mcg = Levonelle®
• Ulipristal (UPA) 30 mg = ellaOne®
When did she have unprotected sex?

- EC is available for episodes of UPSI occurring within the last 5 days (120 hours)
- or if the woman is within 5 days of the anticipated date of implantation*

When was her LMP?

Need to know this for 2 reasons:

- 1. It can help you work out where she is in her cycle and her likely date of ovulation – she is most fertile in the 48 hour window before ovulation – ie highest risk of conceiving
- 2. It will help you calculate when is anticipated date of implantation and thus the latest time in her cycle that an IUD may be fitted

http://www.fsrh.org/pdfs/FSRH_ECDecisionGuide.pdf

- It is too late to offer EC if requested >5 days (120 hours) since a woman’s most recent episode of UPSI
- and after the anticipated date of implantation (i.e. > 5 days since the earliest expected date of ovulation (e.g. day 19 of a 28 day cycle)).

June 2014

UPA EC

- The efficacy of UPA has been demonstrated up to 120 hours after UPSI and there is no apparent decline in efficacy within that time period
- If administered immediately before ovulation UPA has been shown to suppress growth of lead follicles.
- LNG has been shown to be no better than placebo at suppressing ovulation when given immediately prior to ovulation
Calculating the latest time that an IUD may be fitted

1. Take the shortest cycle length – eg if k= 28-30  take 28
2. Subtract 14 from the shortest cycle length to give you the earliest predicted day of ovulation: 28-14 = 14
3. Add 5 to the predicted day of ovulation  this gives you the anticipated day of implantation : 14+5 = day 19
4. Thus day 19 is the latest time an IUD may be fitted in a woman with regular 28 day cycles

Any other considerations?

1. Previous or recent EC use or hormonal contraception
2. Drug or medical history
3. Weight or BMI??

1. Previous or recent EC use

• An “LMP” is not a “LMP” if the woman is using hormonal contraception or has recently taken EHC
  – In these circumstances can only go by time since earliest UPSI
• The CEU does not currently support use of UPA:
  – more than once per cycle
  – if there has been another episode of UPSI outside the treatment window (>120 hours)
  – concomitantly with LNG

2. Relevant drug and medical history

LNG
– Double dose if taking liver-enzyme inducers or within 28/7 of stopping
– There are no UKMEC 3:4 for LNG EC

UPA
• Use not supported by CEU in women using
  • drugs that increase gastric pH (eg, H2 antagonist; PPI)
  • liver-enzyme inducers or for upto 28 days after stopping
• If Breast feeding, advise discard breast milk for 7 days after taking

3. Weight/BMI considerations

• Nov 2013 HRA Pharma released a statement on labelling of the LNG EC product Norlevo
  – “In clinical trials, contraceptive efficacy was reduced in women weighing 75 kg or more and levonorgestrel was not effective in women who weighed more than 80 kg.”
• Norlevo is marketed in Europe (not in UK).
• HRA Pharma also markets ulipristal acetate EC
• Change was based on data from further sub-group analysis of studies initially published in 2011.

• January 2014
• Review of ECs started
• “to assess whether increased bodyweight and BMI reduce the efficacy of these medicines in preventing pregnancy”
Letter to HCP: July 2014

• Data was limited and inconclusive
• ...not robust enough to establish that there is a reduction in efficacy of emergency contraceptives with increase in weight or BMI.
• Emergency contraceptives remain suitable for all women regardless of body weight or BMI

CEU response – July 2014

• Should oral EC be restricted in women with a BMI of over 30kg/m2
  – No.
• Is UPA more effective than LNG in overweight women?
  – No published studies have compared the two directly.
  – It is recommended that the current statement on the impact of body weight in the product information for Norlevo® should be deleted.
• Should LNG-EC be limited in women over 75kg?
  – No. The EMA have decided that the evidence to support this recommendation is insufficient and have not enforced this restriction.
• Should women of heavier weight or BMI be given a double dose oral EC?
  – No. There is no evidence to support this

When did Sophie last have UPSI and were there any earlier episodes?

• Sophie states that she last had sex late Saturday night at 1am and also last Weds night around 11pm

Sophie

• Potential UPSI 2 days ago and 6 days ago
• If we do not have an accurate LMP – we cannot offer an IUD
  – Earliest UPSI was >120 hours ago
  – Too soon for PT to be reliably negative as <3 weeks since SI
• Cannot offer UPA
  – Earliest UPSI was >120 hours ago
• Could give LNG
  – Would cover most recent UPSI 2 days ago
  – Will not work for UPSI 6 days ago
  – If conceives following that SI – LNG will not disrupt pregnancy

But Sophie keeps a note of her periods using an app on her phone
• Her LMP was 22 Oct 2014

When was her LMP?

• LMP 22/10/2014
• She is day 14 of her cycle today
• She has regular 27 day cycles
• Predicted day of ovulation is 27-14= day13
• The latest time she can have an IUD fitted is
• (27-14)+ 5 = day 18 of her cycle
• If you do refer Sophie for IUD
  – Give LNG anyway
  – Perform STI risk assessment
  – If high risk offer chlamydia screening (NAATS)
  – Consider AB prophylaxis – eg 1g Azithromycin PO
    • IF <25 years
    • recent change in sexual partner
    • more than 2 partners in last 12 months
    • No consistent condom use

• But Sophie doesn’t want an IUD
• So we are going to giver her LNG to cover the UPSI 2 days ago
• What else would you do?

Quick-start contraception

• Start COC/POP/implant today
• Advise additional precautions for 7 days (2 days for POP)
• Pregnancy test in 3 weeks

http://www.fsrh.org/pdfs/FSRH_ECDecisionGuide.pdf

• The decision to quick start contraception may influence a woman’s choice of EC...
• additional contraception is required for a longer period of time when quick starting a method after UPA.

Table: Number of days that additional precautions are required after oral EC

<table>
<thead>
<tr>
<th>Method of contraception quick-started</th>
<th>After LNG</th>
<th>After UPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHC (except Ovrala and Dianette)</td>
<td>7</td>
<td>14 (7+7)</td>
</tr>
<tr>
<td>Ovrala</td>
<td>9</td>
<td>16 (9+7)</td>
</tr>
<tr>
<td>Dianette (quickstart NOT recommended)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POP</td>
<td>2</td>
<td>9 (2+7)</td>
</tr>
<tr>
<td>Implant / and DMPA</td>
<td>7</td>
<td>14 (7+7)</td>
</tr>
</tbody>
</table>

Recap of learning objectives....

We have...
• Described the 3 different methods of EC available in the UK
• Evaluated the most appropriate method of EC
• Considered quick-starting contraception after EC