

Emergency Contraception

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Learning Objectives

- ▶ The learning objectives by the end of this session are to understand:
- ▶ What is emergency contraception ?
- ▶ How does emergency contraception prevent pregnancy ?
- ▶ When is emergency contraception indicated ?
- ▶ What options of emergency contraception are available and how do we choose between them ?
- ▶ What other considerations are there ?
- ▶ Should I supply Emergency contraception in advance of need ?

What is Emergency Contraception

- ▶ Emergency contraception is a type of contraception that is effective in preventing pregnancy after sexual intercourse has taken place.
- ▶ Emergency contraception can prevent pregnancy after unprotected sexual intercourse or if contraception has failed.
- ▶ Often called the 'morning after pill' or 'post coital contraception'
- ▶ It is intended for occasional use
- ▶ It should not be used instead of regular contraception
- ▶ Copper IUD EC is the gold standard and should be offered to all.

Where can Emergency contraception be obtained

- ▶ GP surgeries
- ▶ Pharmacy
- ▶ Walk in centers
- ▶ Sexual health clinics
- ▶ A and E departments
- ▶ Minor injury units
- ▶ School nurses
- ▶ On-line pharmacies

EC providers need to :

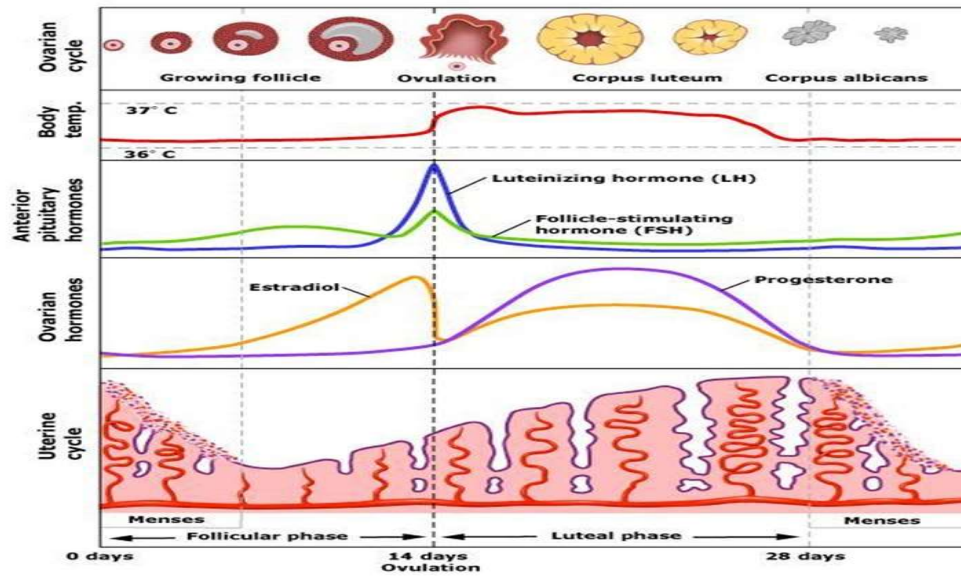
- ▶ If an EC provider cannot provide all the methods, then they need to be able to sign post to services that can provide them
- ▶ So, if providing oral EC women need to be counselled that Copper IUD is more effective and they should be signposted to services that can provide this service.
- ▶ If signposting for copper IUD, then oral EC should be given as well in case the appointment is delayed, or the coil cannot be fitted, or the women changes her mind.

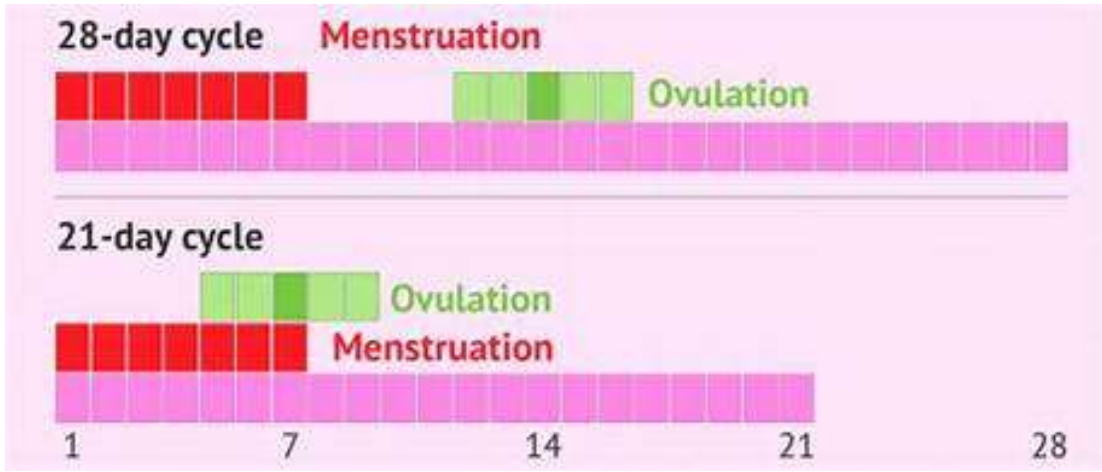
EC providers should also

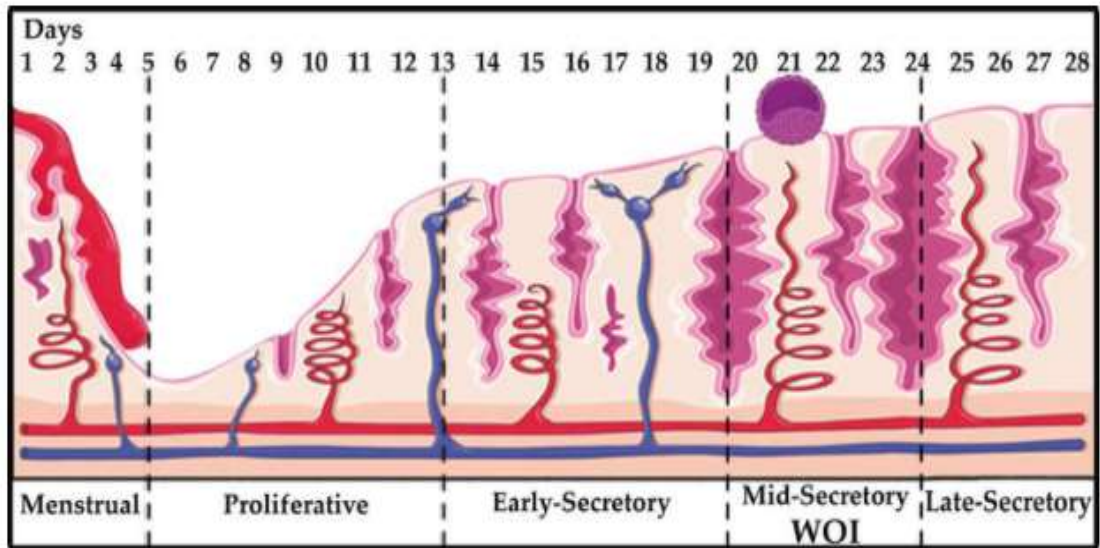
- ▶ Advise women that emergency contraception does not provide on going contraception
- ▶ Provide information about on-going contraception, about all methods and how to access them.
- ▶ Women requesting EC may be at risk of sexually transmitted infections, testing should be offered as appropriate.

Emergency contraception and Covid 19

- ▶ 45 % reduction in provision of emergency contraception in 2020 compared to 2019 in sexual health clinics
- ▶ 18% reduction in provision of emergency contraception in 2020 compared to 2019 in General practice and pharmacies.
- ▶ More than 4000 extra abortions performed in Jan -Jun 2020 than the same period in 2019







When is Emergency contraception (EC) indicated

- ▶ EC should be offered to any women who does not wish to conceive if there is a risk of pregnancy after unprotected sexual Intercourse (UPI)

Theoretically you could fall pregnancy on most days of the cycle

When is emergency contraception Indicated

- ▶ On any day of the menstrual cycle if UPSI has taken place
- ▶ Greatest risk is day 6-14 of a 28-day cycle - the so-called fertile time
- ▶ From day 21 after childbirth unless criteria for lactation amenorrhea are met
- ▶ From day 5 after abortion, miscarriage or ectopic pregnancy
- ▶ Women who have used hormonal contraception incorrectly or if its effectiveness has been compromised

What options do we have

- ▶ Copper Intrauterine device
- ▶ Ulipristal Acetate
- ▶ Levonorgestrel

Copper IUD

- ▶ GOLD STANDARD
- ▶ Inhibits fertilization by its toxic effect on the egg and sperm and local inflammatory reaction of the endometrium prevents implantation
- ▶ It can be inserted up to 5 days after ovulation (earliest day of implantation is 6 days after ovulation) day 19 of a 28 day cycle
- ▶ OR It can be inserted up to 5 days after the first UPSI in the cycle
- ▶ Overall pregnancy rate <0.1%
- ▶ Provides effective on-going contraception
- ▶ Keep at least until pregnancy is excluded (ie onset of next menstruation)

Ullipristol acetate (UPA) EllaOne

- ▶ Selective progesterone receptor modulator
- ▶ 30mg Single oral dose
- ▶ Shown to be more effective than LNG-EC
- ▶ It works by inhibiting ovulation, delaying or preventing follicular rupture for up to 5 days
- ▶ It will work even after the start of the LH surge
- ▶ It is not effective therefore after ovulation
- ▶ It can be used up to 120 hours after UPSI
- ▶ After UPA EC most women ovulate later in the cycle
- ▶ Effective contraception is needed for the rest of the cycle
- ▶ Overall pregnancy rate is 1-2%
- ▶ Women should be advised to wait for 5 days before starting on going hormonal contraception

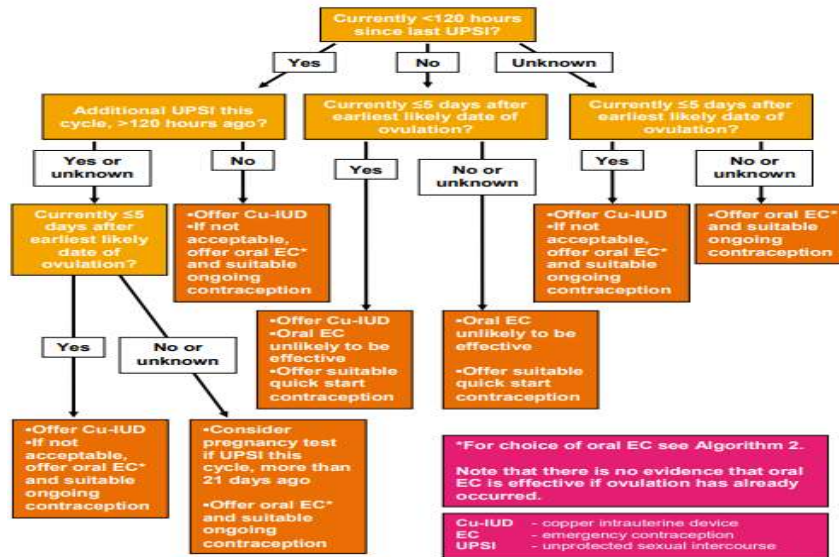
Levonorgestrel (LNG) Levonelle

- ▶ It's a progesterone
- ▶ 1.5 mg single oral dose
- ▶ Needs to be taken before the LH surge starts, unlikely to work after.
- ▶ It works by inhibiting ovulation, delaying or preventing follicular rupture for up to 5 days
- ▶ It is not effective after ovulation
- ▶ It can be used up to 72 hours after UPSI (best taken <24 hours)
- ▶ After LNG EC most women ovulate later in the cycle
- ▶ Effective contraception is needed for the rest of the cycle
- ▶ Overall pregnancy rate is 1-2 %
- ▶ Encourage quick start hormonal contraception

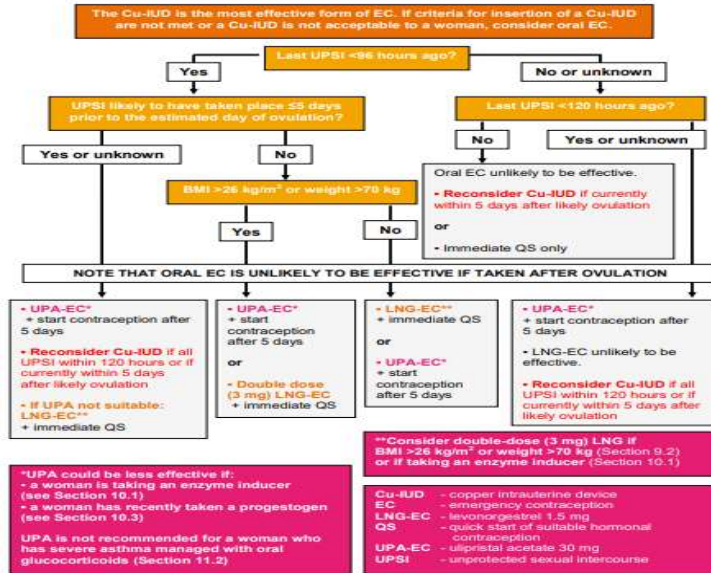
Evidence suggests LNG EC is ineffective after 96 hours of UPSI

Decision-making Algorithms for Emergency Contraception

Algorithm 1: Decision-making Algorithm for Emergency Contraception (EC):
Copper Intrauterine Device (Cu-IUD) vs Oral EC



**Algorithm 2: Decision-making Algorithm for Oral Emergency Contraception (EC):
Levonorgestrel EC (LNG-EC) vs Ulipristal Acetate EC (UPA-EC)**



Obesity

- ▶ Copper IUD effectiveness is not affected by weight
- ▶ Women should be informed that it is possible that higher weight or BMI could reduce the effectiveness of oral EC especially LNG EC
- ▶ UPA EC may be less effective >85kg or BMI > 30
- ▶ LNG EC may be less effective > 70kg or BMI >26
- ▶ If copper IUD or UPA EC is not acceptable and double dose of LNG could be given (off licence)
- ▶ For women >85 kg or BMI >30 if copper IUD is not acceptable then it is not known whether UPA or double dose of LNG is most effective

Drug Interactions

- ▶ Copper IUD is unaffected by concomitant use of drugs
- ▶ Women using enzyme inducing drugs should be warned that the effectiveness of both UPA and LNG EC could be reduced
- ▶ A double dose of LNG could be considered (off licence) but the effectiveness is unknown
- ▶ Check interactions with women who have received HIV post exposure prophylaxis

Remember its for the use of the drug and 28 days after the drug has ceased

UPA and Progesterones

- ▶ The effectiveness of UPA EC could be reduced if a women takes progesterone in the 5 days after taking UPA EC
- ▶ The effectiveness of UPA EC could be reduced if a women has taken progesterone in the 7 days prior to taking UPA EC

Which EC if depo has expired

- ▶ There are no data available to make a recommendation on how long UPA should be avoided following DMPA administration.
- ▶ The return of ovulation after Depo is extremely variable ranging from 15-49 weeks after the last injection
- ▶ Levonorgestrel EC (LNG-EC) would be the preferred EC method in the weeks and early months following DMPA expiry as the remaining levels of progestogen from the injection could reduce the effectiveness of UPA-EC.
- ▶ Once regular menstruation re-established, it would seem reasonable to use UPA for EC if indicated.

Half life of Depo Provera is 6 weeks It take 4-6 half lives for it to be out of the system 6 half lives for it to be out totally This is 36 weeks !!

Which oral EC if the implant has expired

- ▶ CEU suggest that EC is not required in the presence of Nexplanon after it has expired its license between year 3 and 4
- ▶ Levonorgestrel EC would be the preferred oral emergency contraception if an implant was still in situ > 4 years as the remaining levels of progesterone from the implant may reduce the effectiveness of UPA EC

Which oral EC if Mirena has expired

- ▶ Women can be advised that the risk of pregnancy in the 6th year of Mirena (or another 52mg levonorgestrel IUS) is low and emergency contraception is unlikely to be required.
- ▶ Clinicians may consider LNG EC and quick start of other hormonal contraception
- ▶ The effectiveness of UPA EC in the presence of an expired Mirena coil is unknown

What are the side effects of EC

- ▶ Side effects occur in about 10% of patients
- ▶ These tend to be minor, headache, nausea and dysmenorrhea
- ▶ If vomiting occurs within 3 hours a repeat dose should be given
- ▶ Menses can be delayed
- ▶ A pregnancy test should take place after a delay of 7 days or 21 days after last UPSI

Periods generally up to 7 days late but a small number can be a couple of weeks late

Contraindications

- ▶ For IUD these are the same as for routine insertion. Consider risk of STI if UPSI
- ▶ UPA-EC is contraindicated in women who have severe asthma controlled by oral glucocorticoids (Prednisolone)
- ▶ Both UPA and LNG EC are CI in severe hepatic dysfunction, but the body of evidence is that pregnancy would be a worse risk, so a single dose is acceptable

UPA has an anti-glucocorticoid effect

Breast feeding

- ▶ Copper IUD there is a greater risk of perforation when breast feeding but the absolute risk is low
- ▶ If a breast-feeding women has taken UPA they are advised to express and discard the milk for one week
- ▶ Breast feeding is not CI with LNG Studies suggest although present in breast milk not effect on lactation itself or the infant

Can oral EC be used more than once in a cycle

- ▶ If a woman has already taken UPA-EC once in a cycle, EC providers can offer her UPA-EC again after further UPSI in the same cycle.
- ▶ If a woman has already taken LNG-EC once or more in a cycle, EC providers can offer her LNG-EC again after further UPSI in the same cycle.

Can oral EC be used if UPSI earlier in the cycle

- ▶ EC providers can offer a woman UPA-EC or LNG-EC if she has had UPSI earlier in the same cycle as well as within the last 5 days
- ▶ Evidence suggest oral EC will not disrupt an existing pregnancy
- ▶ Evidence suggests oral EC will not cause any fetal abnormality

- ▶ If a woman requiring oral EC for UPSI in the last 5 days has also had (or may also have had) UPSI more than 21 days ago AND has not had a normal menstrual period since the earlier UPSI, a high-sensitivity urine pregnancy test should be done before oral EC is taken.

Ladies need to understand it won't protect against pregnancy for SI taken place earlier in the cycle

Quick start after Emergency contraception

- ▶ Starting contraception can be done at a time other than the beginning of the menstrual cycle and where there is a potential risk of very early pregnancy from recent UPSI (but it is too early to exclude pregnancy) provided there is a negative pregnancy test.
- ▶ Starting in this situation is appropriate if a woman considers it likely that she will continue to be at risk of pregnancy or if she wishes to avoid delaying commencement of contraception.

Advantages of quick starting contraception

- ▶ Reduce the time during which a woman is at risk of pregnancy. Women who have taken EC or who have irregular cycles could have an even longer wait until onset of their next menstrual period.
- ▶ Prevent a woman from forgetting information on correct usage of her contraception.
- ▶ Avoid waning enthusiasm for the method and use of a less reliable alternative method.
- ▶ Avoid costs of, and barriers to, returning for contraception (e.g. transport, time, childcare).
- ▶ Reduce health care costs by reducing the number of appointments needed.

Table 2: Additional contraceptive requirements (condoms/abstinence) when starting contraception excluding after ulipristal acetate emergency contraception administration

Method	Day of menstrual cycle*	Days of additional contraception required
Combined oral contraception	1-5	0
	6 onwards	7
Zoely® COC	1	0
	2 onwards	7
Qlaira® COC	1	0
	2 onwards	9
Combined transdermal patch and vaginal ring	1-5	0
	6 onwards	7
Progestogen-only pill (traditional/desogestrel)	1-5	0
	6 onwards	2
Progestogen-only injectable and implant	1-5	0
	6 onwards	7
Levonorgestrel intrauterine system	1-7	0
	8 onwards	7
Copper intrauterine device	Any start day	0

Remember we would not quick start IUS after EC

Can oral EC be supplied in advance of need

- ▶ 'In Advance' prescription does not decrease pregnancy rates
- ▶ However, there is evidence to show that oral EC is taken sooner after UPSI
- ▶ Advance prescription did not lead to increase frequency of UPSI, increase STI's or change in contraceptive use
- ▶ Access to EC has improved especially with OTC UPA and LNG
- ▶ Routine advance provision is not cost effective
- ▶ However, there may be situations where it is considered appropriate

Case

- ▶ Sarah was 24 years old and presented to the practice nurse for a late depo injection. She had been on the depo injection for 4 years and really liked the fact she had no periods. However, she had been busy at work, doing lots of travelling, and she was now 14 weeks + 4 weeks.
- ▶ You enquire if she has had UPSI since then and she says yes but not sure when and how many times, although she did have sex last night
- ▶ She is not having any periods at present. She is otherwise fit and well. She takes no regular medications. Her BP is 120/67 and weight 72kg with a BMI of 27
- ▶ What EC would be suitable ?

References

- ▶ <https://www.fsrh.org/standards-and-guidance/documents/ceu-clinical-guidance-emergency-contraception-march-2017/>
- ▶ <https://www.fsrh.org/standards-and-guidance/documents/fsrh-clinical-guidance-quick-starting-contraception-april-2017/>
- ▶ FPA YouGov survey 2017
- ▶ (http://www.hivdruginteractions.org/drug_queries/new).