Oral Contraception, Injectable contraception, Implant and Intrauterine Devices

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60 minutes

- Emergency contraception
- Combined oral contraception(COCP)
- Progesterone only pill (POP), injectable progesterone and implant
- Intrauterine devices

Indications for EC

1-All Women who do not wish to conceive after unprotected sexual intercourse (UPSI) taken place on any day of a natural menstrual cycle are entitled to EC .

2-If UPSI has happened from Day 21 postnatally (unless the criteria for lactational amenorrhoea is met:

(Amenorrhoeic and fully exclusive breastfeeding for 6 months and breastfeeding 4 hourly).

3-If UPSI from Day 5 after abortion, miscarriage, ectopic pregnancy or uterine evacuation for gestational trophoblastic disease (GTD).

4- If UPSI occurred when regular contraception has been compromised or has been used incorrectly

5-Adolescents who need EC should be offered all methods of EC including the Cu-IUD.

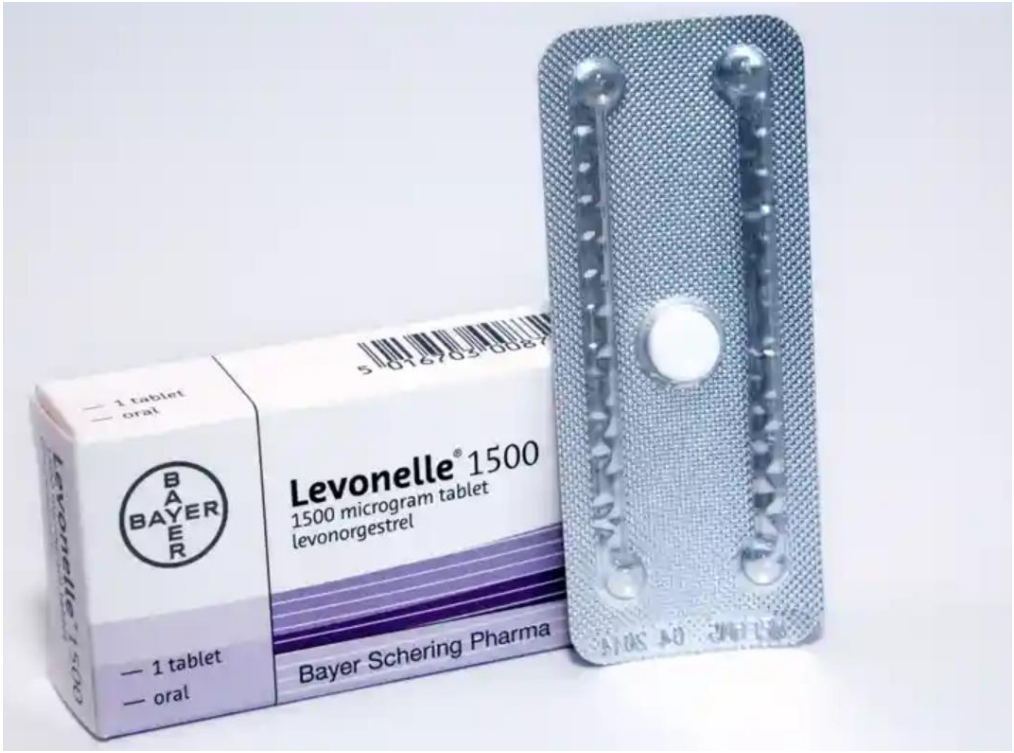
. 6-Women requiring EC after sexual assault should be offered all methods of EC including the Cu-IUD.

7-EC providers should be aware that UPA-EC is not suitable for use by women who have severe asthma controlled by oral glucocorticoids.

8- Women should be informed that it is possible that high BMI could reduce the effectiveness of oral EC, particularly LNG-EC.

Levonorgestrel EC

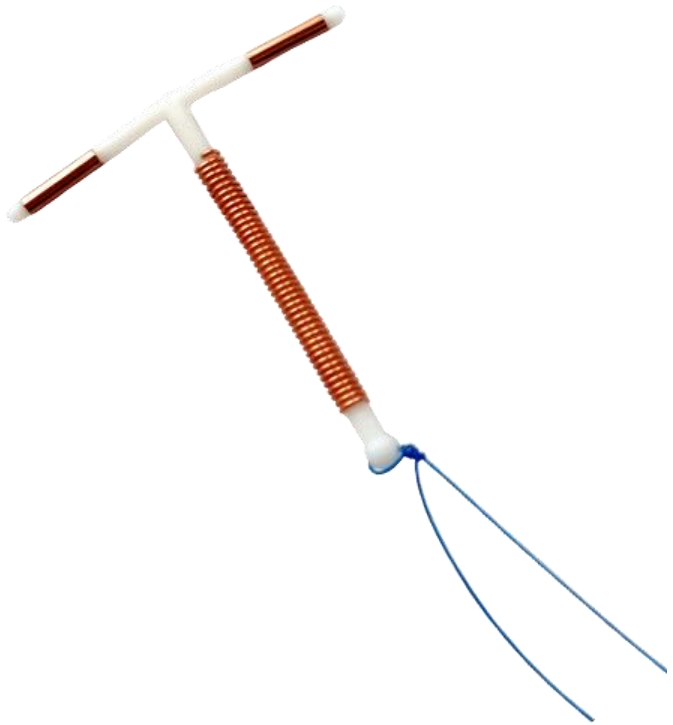
- We should advise women that levonorgestrel is licensed for EC up to 72 hours after UPSI. T
- The evidence suggests that LNG-EC is ineffective if taken more than 96 hours after UPSI.
- We should advise women using enzyme-inducing drugs that the effectiveness of LNG-EC could be reduced. Therefore 3 mg dose of LNG can be considered but women should be informed that the effectiveness of this regimen is unknown
- If a woman has already taken LNG-EC once or more in a cycle, we can offer her LNG-EC again after further UPSI in the same cycle but it is less effective if taken within 7 days
- **1.5mg** or 3mg (BM1>26)
- Not suitable if UPSI >midcycle or if ovulation has occurred
- Safe to use as EC postnatally as no delay on breastfeeding.
- If failure to protect no foetal abnormality identified from use



Ulipristal pill Progesterone receptor modulator

- We should advise women that UPA-EC has been demonstrated to be more effective than LNG-EC120
- We should be aware that the effectiveness of UPA-EC could be reduced if a woman takes progestogen in the 5 days after taking UPA-EC.
- We should be aware that the effectiveness of UPA-EC could theoretically be reduced if a woman has taken progestogen 7 days prior to UPA-EC therefore LNG-EC should be used in this case .
- We should advise women that ulipristal acetate EC (UPA-EC) has been demonstrated to be effective for EC up to 120 hours after UPSI.
- Not suitable if UPSI >midcycle or if ovulation has occurred
- Hormonal treatment is delayed up to 5 days
- If postnatally not to breastfeed for week / to express and discard milk
- We should advise women using enzyme-inducing drugs that the effectiveness of UPA-EC could be reduced. A double-dose of UPA-EC is not recommended
- We should also consider and inform women that it is not effective in women who are on regular PPI due to change in gastric ph and UPA is only soluble in low gastric PH .

IUD(Copper device/coil)



- Most effective method 99%effective
- 5 days post UPSI or if UPSI occurred 5 days after ovulation occurred
- Can continue as contraception method:if inserted when a woman is aged >40 years, a Cu-IUD will be effective for contraception until after the menopause
- Women requiring EC who are using enzyme-inducing drugs should be offered a Cu-IUD if appropriate
- CI if current PID

Advantages of IUD

- Although an IUD is an effective method of contraception, there are some things to consider before having one fitted.
- It protects against pregnancy for 5 or 10 years, depending on the types:
- Nova-T ® 380. For uterine length 6.5–9 cm; replacement every 5 years
- Flexi-T ®+ 380. For uterine length over 6 cm; replacement every 5 years
- UT380 Short for uterine length over 5-7 cm ;replacement every 5 years
- Ancora ® 375 Cu for uterine length over 6.5 cm ;replacement every 5 years
- Neo-Safe ® T380 for uterine length over 6.5-9 cm ;replacement every 5 years
- Multi-Safe ® 375 for uterine length over 6-9 cm ;replacement every 5 years
- Multiload ® Cu375 for uterine length over 6-9 cm ;replacement every 5 years
- T-Safe ® 380A QL for uterine length over 6-9 cm ;replacement every 10 years
- Copper T380 for uterine length over 6.5 -9 cm ;replacement every 10 years
- Once an IUD is fitted, it works straight away.
- Most women can use it.
- There are no hormonal side effects, such as acne, headaches or breast tenderness.
- It does not interrupt sex.
- It's safe to use an IUD if you're breastfeeding.
- It's possible to get pregnant as soon as the IUD is removed.
- It's not affected by other medicines.
- There's no evidence that an IUD will affect your weight or increase the risk of cervical cancer, cancer of the uterus or ovarian cancer.

Disadvantages of IUD

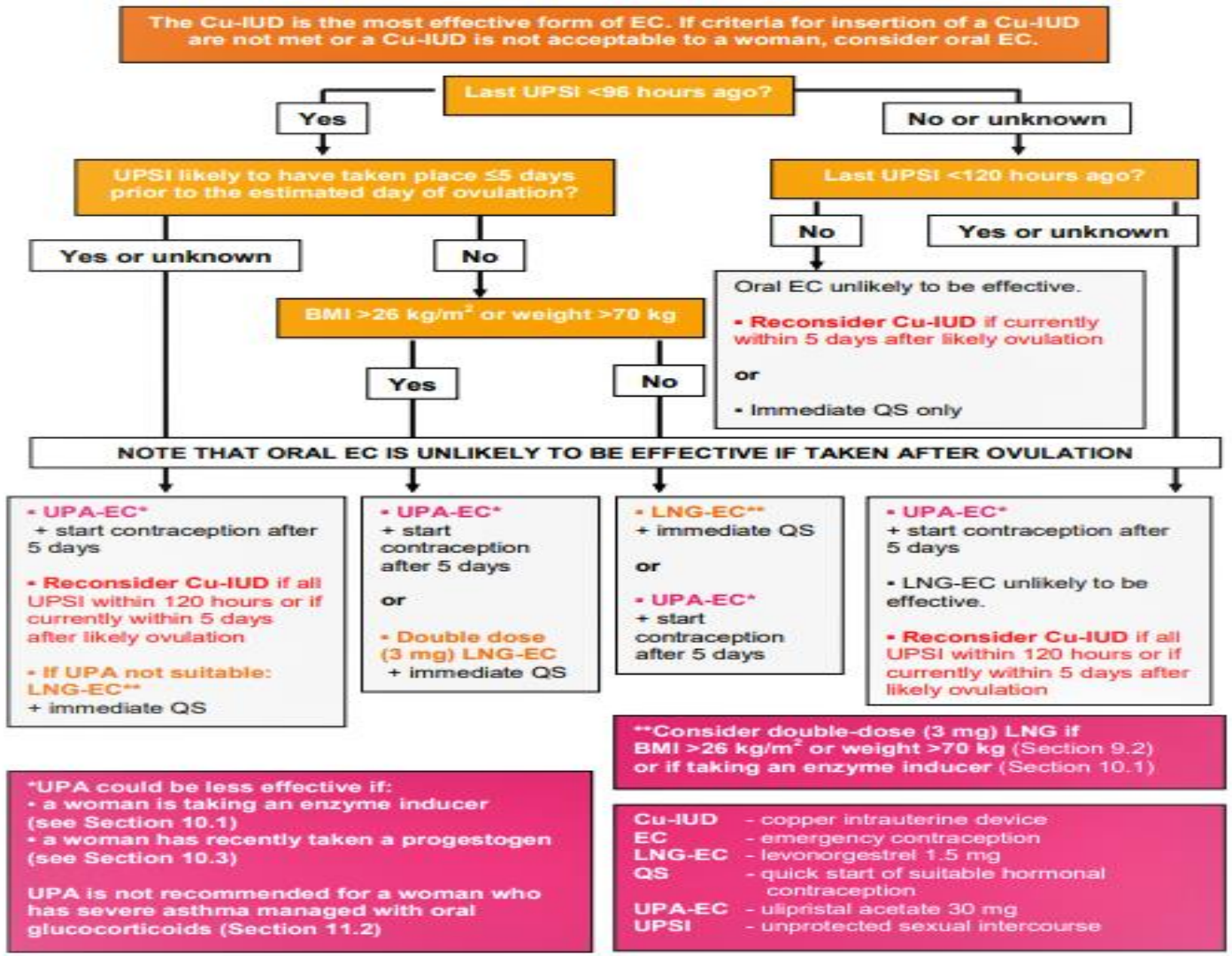
- Your periods may become heavier, longer or more painful, though this may improve after a few months.
- It does not protect against STIs, so you may need to use condoms as well.
- If you get an infection when you have an IUD fitted, it could lead to a pelvic infection if not treated.
- Most women who stop using an IUD do so because of vaginal bleeding and pain, although these side effects are uncommon.

Risks of the IUD

- **Pelvic infections**
- There's a very small chance of getting a pelvic infection in the first 20 days after the IUD has been inserted.
- You may be advised to have a check for any existing infections before an IUD is fitted.
- **Thrush**
- There's some limited evidence that if you have an IUD fitted, you may have a slightly higher chance of getting thrush that keeps coming back.
- **Rejection**
- It's not common, but the IUD can be rejected (expelled) by the womb or it can move (displacement).
- If this happens, it's usually soon after it's been fitted. You'll be taught how to check that your IUD is in place.
- **Damage to the womb**
- In rare cases, an IUD can make a hole in the womb when it's put in. This may be painful, but often there are no symptoms.
- If the GP or nurse fitting your IUD is experienced, the risk is extremely low. But see a GP straight away if you're feeling pain, as you may need surgery to remove the IUD.
- **Ectopic pregnancy**
- If the IUD fails and you become pregnant, there's also a small increased risk of ectopic pregnancy

FSRH

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



COCP

If started on day 5 of new cycle no need for barrier otherwise barrier protection required until 7 consecutive pills used.

-21+7day brake (withdrawal bleed)

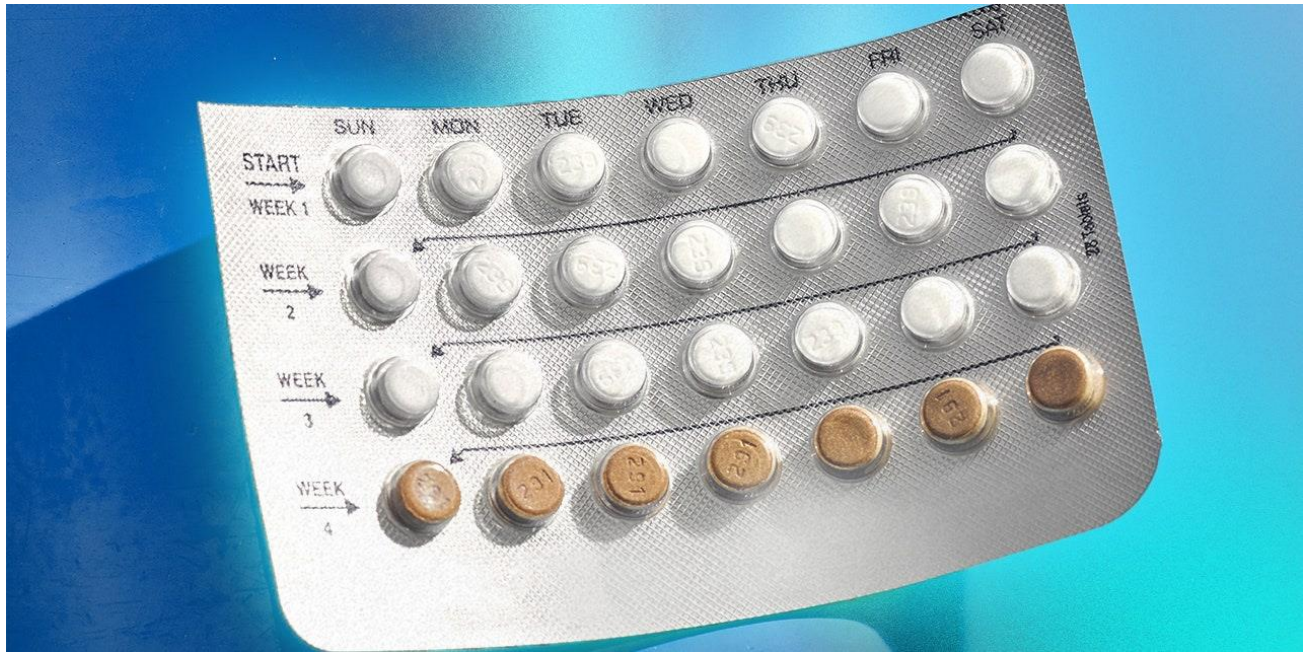
-Recent evidence : can be taken back -to -back for 3 months

Missed pill rules :

1 pill take next pill asap

2 pills :

- Week 1 : consider emergency contraception and take next one asap and use condom for 7 days until 7 consecutive pills are taken.
- Week 2: if 7 pills taken consecutively then no need for emergency contraception and precaution barrier for 7 days until 7 consecutive pills are taken.
- Week 3: back- to- back packs , no need for emergency contraception and precaution barrier for 7 days until 7 consecutive pills are taken.



COCP

- **COCP** contains **ethyniloestradio**l EE, **oestradiol valerate** or **oestradiol** and one of the ranges of **progestogens.**
- **Contraceptive mechanism:**

- **Ethynilestradiol** works on **hypothalamic-pituitary-ovarian axis** to **suppress** synthesis and secretion of **FSH and mid-cycle LH surge** ,thus inhibiting **ovulation**

- **Progestin** also makes **implantation less likely** as it causes **thickening of cervical mucu**s, a decrease of tubal motility and **the inhibition of endometrial proliferation**

- **Types of COCP :**

1-Monophasic COCP: first line

- every pill has the same level of both hormones through cycle:21-28 days pills pack.
- Most commonly used : Microgynon, Rigevidon Ovranete
- **2- Biphasic and triphasic pills**:
- levels of oestrogen and progesterone vary through cycle
- Important to take in correct order .
- Used to reduce side effects and complication related to COCP
- The idea is to reduce hormonal levels to minimum amount possible
- Where a patient expresses a preference for phasic products we need to refer to the Integrated Contraception and Sexual Health services (iCASH).

- **3-Combined transdermal patch/** Evra R : one patch once a week for 3 weeks and one week off /breakthrough bleed

- **4-Combined vaginal ring** /Nuvaring (latex free):15ethyniloestradiol /120 etonogestrel: one ring for 3 weeks , then 1 week free/breakthrough bleed then re insert new one

- PLEASE REMEMBER : to provide patient information :

- https://patient.info/sexual-health/hormone-pills-patches-and-rings/combined-oral-contraceptive-coc-pill

Monophasic COCP

- every pill has the same level of both hormones through cycle:21-28 days pills pack.
- **Standard strength:**

- Rigevidon R(ethynilestradiol/levonogestrel 30/150 mcg)
- Cilique R(ethynilestradiol/norgestimate 35/250mcg)
- Gedarel R:(ethynilestradiol/desogestrel 30/150mcg)(estrogenic side effects : nausea, breast enlargement/mastalgia)
- Millinete R(ethynilestradiol/gestodene 30/75 mcg) (estrogenic side effects)
- **Low strength:**
- Gedarel R(ethynilestradiol/desogestrel 20/150mcg)
- Millinete R(ethynilestradiol/gestodene 20/75mcg)

Combined Oral Contraceptives Monophasic 21-day preparations

Oestrogen content	Progestogen content	Brand
Ethinylestradiol 20 micrograms	Desogestrel 150 micrograms	Gedarel® 20/150
Ethinylestradiol 20 micrograms	Desogestrel 150 micrograms	Mercilon®
Ethinylestradiol 20 micrograms	Gestodene 75 micrograms	Femodette®
Ethinylestradiol 20 micrograms	Gestodene 75 micrograms	Millinette® 20/75
Ethinylestradiol 20 micrograms	Gestodene 75 micrograms	Sunya® 20/75
Ethinylestradiol 20 micrograms	Norethisterone acetate 1 mg	Loestrin® 20
Ethinylestradiol 30 micrograms	Desogestrel 150 micrograms	Gedarel® 30/150
Ethinylestradiol 30 micrograms	Desogestrel 150 micrograms	Marvelon®
Ethinylestradiol 30 micrograms	Drospirenone 3 mg	Yasmin®
Ethinylestradiol 30 micrograms	Gestodene 75 micrograms	Femodene®
Ethinylestradiol 30 micrograms	Gestodene 75 micrograms	Katya® 30/75
Ethinylestradiol 30 micrograms	Gestodene 75 micrograms	Millinette® 30/75
Ethinylestradiol 30 micrograms	Levonorgestrel 150 micrograms	Levest®
Ethinylestradiol 30 micrograms	Levonorgestrel 150 micrograms	Microgynon® 30
Ethinylestradiol 30 micrograms	Levonorgestrel 150 micrograms	Ovranette®
Ethinylestradiol 30 micrograms	Levonorgestrel 150 micrograms	Rigevidon®
Ethinylestradiol 30 micrograms	Norethisterone acetate 1.5 mg	Loestrin® 30
Ethinylestradiol 35 micrograms	Norgestimate 250 micrograms	Cilest®
Ethinylestradiol 35 micrograms	Norethisterone 500 micrograms	Brevinor®
Ethinylestradiol 35 micrograms	Norethisterone 1 mg	Norimin®
Mestranol 50 micrograms	Norethisterone 1 mg	Norinyl-1®

Combined Oral Contraceptives Monophasic 28-day preparations

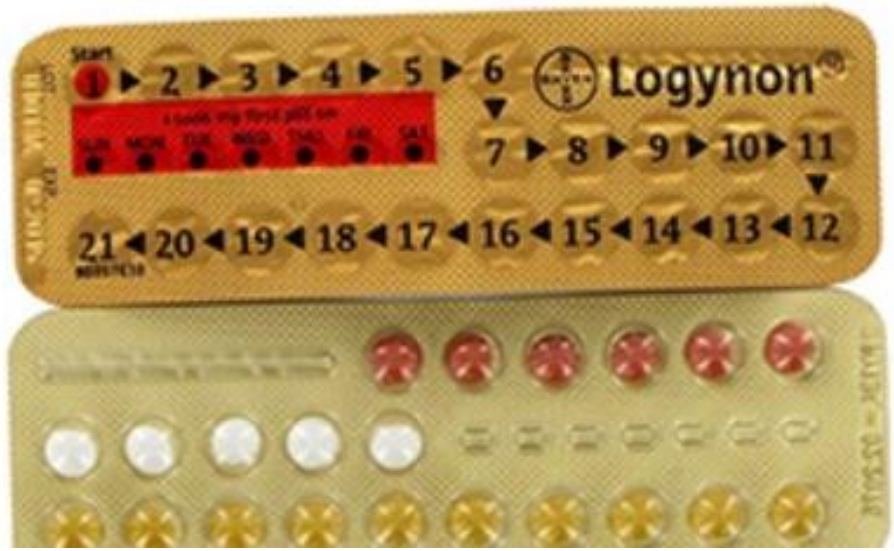
Oestrogen content	Progestogen content	Brand
Ethinylestradiol 30 micrograms	Gestodene 75 micrograms	Femodene® ED
Ethinylestradiol 30 micrograms	Levonorgestrel 150 micrograms	Microgynon® 30 ED
Estradiol (as hemihydrate) 1.5 mg	Nomegestrol acetate 2.5 mg	Zoely®

Biphasic COCP

- Provide same level of estrogen every day but levels of Progestin is increased about halfway of through pill cycle .
- During first half of the cycle ratio is lower then in the second half to mimic the pattern of natural cycle .
- First 7-10 days are of one strength /one colour , the next 11-14 days are of another strength/another colour . Last 7 days are placebo pills and do not contain hormones .

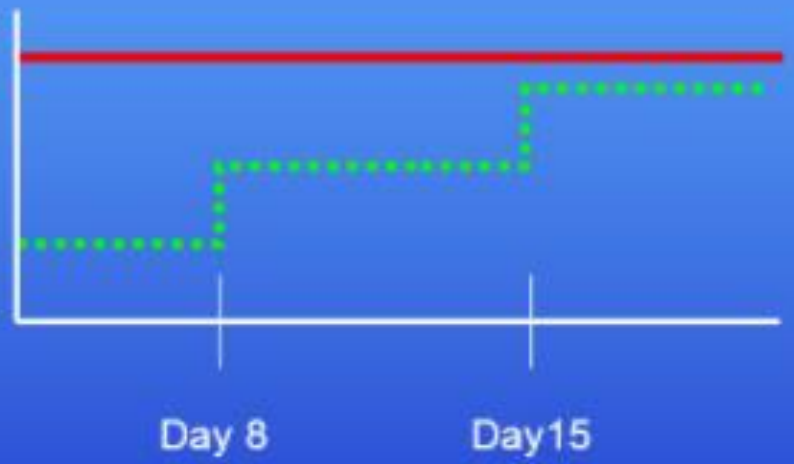
Triphasic COCP

- 3 cycles of 7 days have a different hormonal concentration of estrogen and progestin and last week is hormone free .
- Same rules apply for advantages and disadvantages



Triphasic pills

- Estrogen
- Progesterone



Examples – Caziant®; Cylessa®; Necon 7/7/7®; Ortho-Novum 7/7/7 ®; Ortho Tri-Cyclen ®; Tri-Sprintec®; TriNessa®; Velivet®

Combined Oral Contraceptives Multiphasic 21-day preparations

Oestrogen content	Progestogen content	Brand
Ethinylestradiol 30 micrograms	Levonorgestrel 50 micrograms	Logynon®
Ethinylestradiol 40 micrograms	Levonorgestrel 75 micrograms	
Ethinylestradiol 30 micrograms	Levonorgestrel 125 micrograms	
Ethinylestradiol 30 micrograms	Levonorgestrel 50 micrograms	TriRegol®
Ethinylestradiol 40 micrograms	Levonorgestrel 75 micrograms	
Ethinylestradiol 30 micrograms	Levonorgestrel 125 micrograms	
Ethinylestradiol 35 micrograms	Norethisterone 500 micrograms	Synphase®
Ethinylestradiol 35 micrograms	Norethisterone 1 mg	
Ethinylestradiol 35 micrograms	Norethisterone 500 micrograms	

Combined Oral Contraceptives Multiphasic 28-day preparations

Oestrogen content	Progestogen content	Brand
Ethinylestradiol 30 micrograms	Levonorgestrel 50 micrograms	Logynon® ED
Ethinylestradiol 40 micrograms	Levonorgestrel 75 micrograms	
Ethinylestradiol 30 micrograms	Levonorgestrel 125 micrograms	
Estradiol valerate 3 mg		Qlaira®
Estradiol valerate 2 mg	Dienogest 2 mg	
Estradiol valerate 2 mg	Dienogest 3 mg	
Estradiol valerate 1 mg		

Advantages

- Non invasive and more effective than barrier contraception
- Can regulate cycle, lighter periods and less painful
- Can improve acne in some women
- Help with premenstrual syndrome symptoms
- Reduce cancer risk: endometrial, colorectal, ovarian cancer and ovarian benign tumours or cysts
- Fertility returns nearly immediately after
- Conflicting evidence : may reduce risk of benign breast disease and Osteoporosis
- Reduced dysmenorrhoea and menorrhagia
- Management of symptoms of polycystic ovary syndrome (PCOS), endometriosis and premenstrual syndrome
- Improvement of acne
- Reduced menopausal symptoms
- Maintaining bone mineral density in peri-menopausal females under the age of 50 years.

Disadvantages

- Not effective for everyone : UKMEC 4&3
- If used with cytochrome-p450 inducers could decrease efficacy
- Remembering to take pill everyday
- Nausea
- Headaches
- Breast tenderness
- Breakthrough bleeding
- Do not provide protection for STI’s
- Increased risk of breast and cervical cancer

Possible side effects of hormonal contraceptive methods: classification according to hormone class

Side effect	Estrogenic	Progestogenic
Acne +/- seborrhoea	-	+ (especially first and second generation)
Anxiety	-	+
Bloating	+	+
Breast swelling	+	-
Breast tenderness	+	+/-
Decreased sex drive	+	+/- (assoc. with depression)
Depression	-	+
Growth of uterine fibroids	+	-
Headaches	+	+
Hirsutism	-	+
Irregular bleeding	+/-	+
Mood swings	+/-	+
Nausea/vomiting	+	-
Raised BP	+	-
Weight gain	+/- (water retention: cyclical gain)	+/- (increased appetite: sustained gain- mainly DMPA)

UKMEC 3&4

- **UKMEC 4:Absolute CI**

- Postpartum: 0-<6 weeks postpartum
- 1- postpartum sepsis
- 2- post- abortion sepsis)
- Age:>35 yrs old
- Smoking >15 cigarettes/day
- Bp > 160/100
- Vascular disease :(current or hx of IHD, current or hx of stroke/TIA
- Hx of VTE or current VTE and on anticoagulants
- Major surgery with prolonged immobilisation
- Known with thrombogenic mutations (factor V Leiden, prothrombin mutation, protein S & C and Antithrombin deficiencies)
- PMHX:
- 1-Complicated pulmonary hypertension
- 2-subacute bacterial endocarditis
- 3-impaired cardiac function
- 4-AF
- 5-Headeaches:
- - Non -migrainous mild or severe
- -Migraine with /without aura
- 6-Undiagnosed breast condition /current breast cancer

- **UKMEC 3 CI: disadvantages outweigh advantages**

- Postpartum:<6/52 post partum
- Smoking<15 cigarettes/day Stopped smoking in the last year
- Age <35 yrs old
- BMI>35
- PMHX:
- 1- cardiac graft vasculopathy
- 2- HTN : BP >140/90 and even if adequately controlled
- 3-dyslipidaemias
- 4-Migraine without aura at any age
- 5-Past hx of breast cancer
- 6-Nephropathy/retinopathy/neuropathy
- 7-other vascular disease
- FHx
- 1-1st degree relative <45 yrs old with hx of VTE
- 2-Carriers of BRACA1/2 and fhx of breast ca: first degree relative
-

UKMEC 2&1

- **UKMEC 2: advantages outweigh disadvantages**
- Age <35 yrs old
- Stopped smoking >1 year
- BMI 30-34 kg/m2
- Postnatal : >6 weeks -6 months post partum(primarily breastfeeding)
- Uncomplicated organ transplant
- Hx of high BP during pregnancy
- Known dyslipidaemias
- 1st degree relative >45 years of age of VTE
- Major surgery without prolonged immobilisation
- Superficial venous thrombosis
- Uncomplicated valvular and congenital heart disease
- Cardiopathy with normal cardiac function
- Known long QT syndrome
- Idiopathic intracranial hypertension
- CIN

- **UKMEC 1 SAFE TO USE**
- Nulliparous
- Parous
- Non smoker
- BMI<30
- >6 months post partum (breastfeeding)
- >6 weeks post partum (not breastfeeding)
- Post abortion, ectopic, pelvic surgery
- Minor surgery without immobilisation
- Varicose veins
- Epilepsy
- Depressive disorders
- Irregular pv bleeds without heavy bleeds
- Endometriosis
- Benign ovarian tumours
- Severe dysmenorrhoea
- Gestational trophoblastic disease
- Undetectable HCG levels
- Ectropion
- Benign breast conditions
- Endometrial/ovarian cancer

Disadvantages and contraindications

- Disadvantages include the following:
- For one thing, it has to be taken daily at almost exactly the same time, so that its efficacy depends largely upon the user's memory. The newer POP containing desogestrel offers a margin of 12 hours in contrast to the three-hour grace period earlier available with conventional POPs.
- The POP cannot prevent sexually transmitted infections (STIs).
- Women on liver enzyme-inducing drugs such as phenytoin or barbiturates, or the herbal St. John's wort, cannot expect reliable contraception with POPs.
- Regular menstruation cannot be expected. Menstrual abnormalities are almost universal, such as irregular bleeding, menorrhagia, amenorrhea, or extremely light spotting, especially for the first few months.
- It can cause other hormonal adverse effects such as:
    - Nausea
    - Acne
    - Breast tenderness or enlargement
    - Weight gain
    - Headaches
    - Mood changes especially depression
    - Decreased sex drive
    - Development of follicular ovarian cysts due to abnormal follicle maturation. Such cysts are usually not symptomatic, and are self-limited.
    - A small increase in the risk of breast cancer
    - Increased risk of ectopic pregnancy if a woman on the POP conceives

- It is contraindicated, unless no other method of contraception is possible, in women with :
- Past or current breast cancer
- Severe cirrhosis or hepatic tumours
- Current cerebrovascular or cardiovascular disease, especially with the newer POP such as desogestrel
- Factors which increase the risk of VTE, in the case of desogestrel or drospironene
- Women with systemic lupus erythematosus (SLE) who test positive for antiphospholipid antibodies
- Those on certain medications such as anticonvulsants or antiretroviral therapy, or antibiotics, which induce liver enzymes

POP(progesterone only pill)

- Commenced on first 5 days of the cycle or at any time if there is addition protection for 2 days.
- It has a high efficacy of 94 %, though this is lower than that of the combined oral contraceptive pill
- It contains less progestogen than the combined oral contraceptive and no estrogen at all
- It is dependent of the act and timing of sexual intercourse
- It is safe for use during lactation because it does not suppress breast milk production
- It can be used at any age
- It can cause SE : irregular bleeds breast tenderness, ovarian cysts ,weight gain, headaches, acne but gets better with time.
- It can be used by women who have contraindications to the use of estrogen, such as those who have:
- Missed pill rule easier compared to COCP :
- Most POP window period 3 hours .
- If missed one pill within less than 3 hours take the next one as soon as possible and continue as normal .
- If missed more then 3 hours then take the next pill and barrier protection for 2 days
- The only exception to this is Desogestrel(Cerazzete) has 12 hours window :same rules of missing pill apply

POP mostly used in UK

- Brands currently available in the UK are :
- **Micronor®**
- **Noriday®** N
- Norgeston®
- A newer type of POP contains a progestogen hormone called **desogestrel**:
- **Cerazette®**
- Aizea®
- **Cerelle®**
- Feanolla®

- Please remember to provide patient information:
- https://patient.info/sexual-health/hormone-pills-patches-and-rings/progestogen-only-contraceptive-pill-pop

Parenteral progestogen-only contraceptives

- Medroxyprogesterone acetate (*Depo-Provera*®, *SAYANA PRESS*®) is a long-acting progestogen given by injection; it is at least as effective as the combined oral preparations but because of its prolonged action it should never be given without *full counselling backed by the patient information leaflet*.
- It may be used as a short-term or long-term contraceptive for women who have been counselled about the likelihood of menstrual disturbance and the potential for a delay in return to full fertility.
- Delayed return of fertility and irregular cycles may occur after discontinuation of treatment but there is no evidence of permanent infertility. Troublesome bleeding has been reported in patients given medroxyprogesterone acetate in the immediate puerperium; delaying the first injection until 6 weeks after birth may minimise bleeding problems.
- If the woman is not breast-feeding, the first injection may be given within 5 days postpartum (she should be warned that the risk of troublesome bleeding may be increased).
- In adolescents, medroxyprogesterone acetate (*Depo- Provera*®, *SAYANA PRESS*®) should be used only when other methods of contraception are inappropriate;
- in all women, the benefits of using medroxyprogesterone acetate beyond 2 years should be evaluated against the risks;
- in women with risk factors for osteoporosis, a method of contraception other than medroxyprogesterone acetate should be considered.
- **Norethisterone enantate** (*Noristerat*®) is a long-acting progestogen given as an oily injection which provides contraception for 8 weeks; it is used as short-term interim contraception e.g. before vasectomy becomes effective.

- Please remember to provide patient information
- https://patient.info/sexual-health/long-acting-reversible-contraceptives-larc/contraceptive-injection

Implant

- The contraceptive implant (Nexplanon) is a small flexible plastic rod that's placed under the skin in your upper arm by a doctor or nurse.
- It releases the hormone progestogen into your bloodstream to prevent pregnancy and lasts for 3 years.
- The implant is more than 99% effective.
- Once the implant is in place, you don't have to think about it again for 3 years.
- It can be useful for women who can't use contraception that contains oestrogen.
- It's very useful for women who find it difficult to remember to take a pill at the same time every day.
- The implant can be taken out if you have side effects.
- You can have it removed at any time, and your natural fertility will return very quickly.
- When it's first put in, you may feel some bruising, tenderness or swelling around the implant.
- Your periods may become irregular, lighter, heavier or longer.
- A common side effect is that your periods stop (amenorrhoea). It's not harmful, but you may want to consider this before deciding to have an implant.
- Some medicines can make the implant less effective.
- It doesn't protect against sexually transmitted infections (STIs), so you may need to use condoms as well
- Please remember to provide patient information
- https://patient.info/sexual-health/long-acting-reversible-contraceptives-larc/contraceptive-implant

Implant

- **How it works**
- The implant steadily releases the hormone progestogen into your bloodstream, which prevents the release of an egg each month (ovulation).
- It also thickens the cervical mucus, which makes it more difficult for sperm to move through the cervix, and thins the lining of the womb so a fertilised egg is less likely to implant itself.
- **When it starts to work**
- You can have the implant put in at any time during your menstrual cycle, as long as you're not pregnant.
- If the implant is fitted during the first 5 days of your menstrual cycle, you'll be immediately protected against becoming pregnant.
- If it's fitted on any other day of your menstrual cycle, you'll need to use additional contraception (such as condoms) for 7 days.
- **After giving birth**
- You can have the implant fitted any time after you've given birth.
- If it's fitted before day 21 after the birth, you'll be immediately protected against becoming pregnant.
- If it's fitted on or after day 21, you'll need to use additional contraception (such as condoms) for the next 7 days.
- It's safe to use the implant while you're breastfeeding.
- **After a miscarriage or abortion**
- The implant can be fitted immediately after a miscarriage or an abortion and you'll be protected against pregnancy straight away.

Advantages and disadvantages of the implant

- Advantages:
- it works for 3 years
- it doesn't interrupt sex
- it's an option if you can't use oestrogen-based contraception, such as the combined contraceptive pill, contraceptive patch or vaginal ring
- it's safe to use while you're breastfeeding
- your fertility will return to normal as soon as the implant is taken out
- it may reduce heavy periods or period pain
- Disadvantages:
- you may experience temporary side effects during the first few months, like headaches, nausea, breast tenderness and mood swings
- your periods may be irregular or stop altogether
- you may get acne or your acne might get worse
- you'll need a small procedure to have it fitted and removed
- it doesn't protect you against sexually transmitted infections (STIs), so you may need to use additional contraception (such as condoms) as well
- In rare cases, the area of skin where the implant has been fitted can become infected. If this happens, you may need antibiotics.

- **Will other medicines affect the implant?**
- Some medicines can make the implant less effective, such as:
- medicines for HIV, epilepsy and tuberculosis
- complementary remedies, such as St John's Wort
- some antibiotics, such as rifabutin or rifampicin
- If you're taking any of these medicines, you'll need additional contraception (such as condoms), or you may wish to use a different method of contraception that isn't affected by your medicine.
- Always tell your doctor that you're using an implant if you're prescribed any medicine. You can also ask them whether the medicine you're taking will affect the implant.

Irregular bleeding

for women using a progestogen-only injectable contraceptive who have problematic bleeding, mefenamic acid 500 mg twice daily (or as licensed up to three times daily) for 5 days can reduce the length of a bleeding episode but has little effect on bleeding in the longer term.

For women with problematic bleeding using a progestogen-only injectable, implant or intrauterine system (IUS) who wish to continue with the method and are medically eligible, a COC may be tried for 3 months (this can be used in the usual cyclic manner or continuously without a pill-free interval and is outside the product licence).

Longer-term use of COC has not been studied in relation to the progestogen-only injectable, implant or IUS methods. If bleeding recurs following 3 months use of COC, longer-term use is a matter of clinical judgement.

✔ A speculum examination should be performed for women using hormonal contraception who have problematic bleeding if they have persistent bleeding or a change in bleeding after at least 3 months of use, if medical treatment has failed or if they have not participated in an NHSCSP.

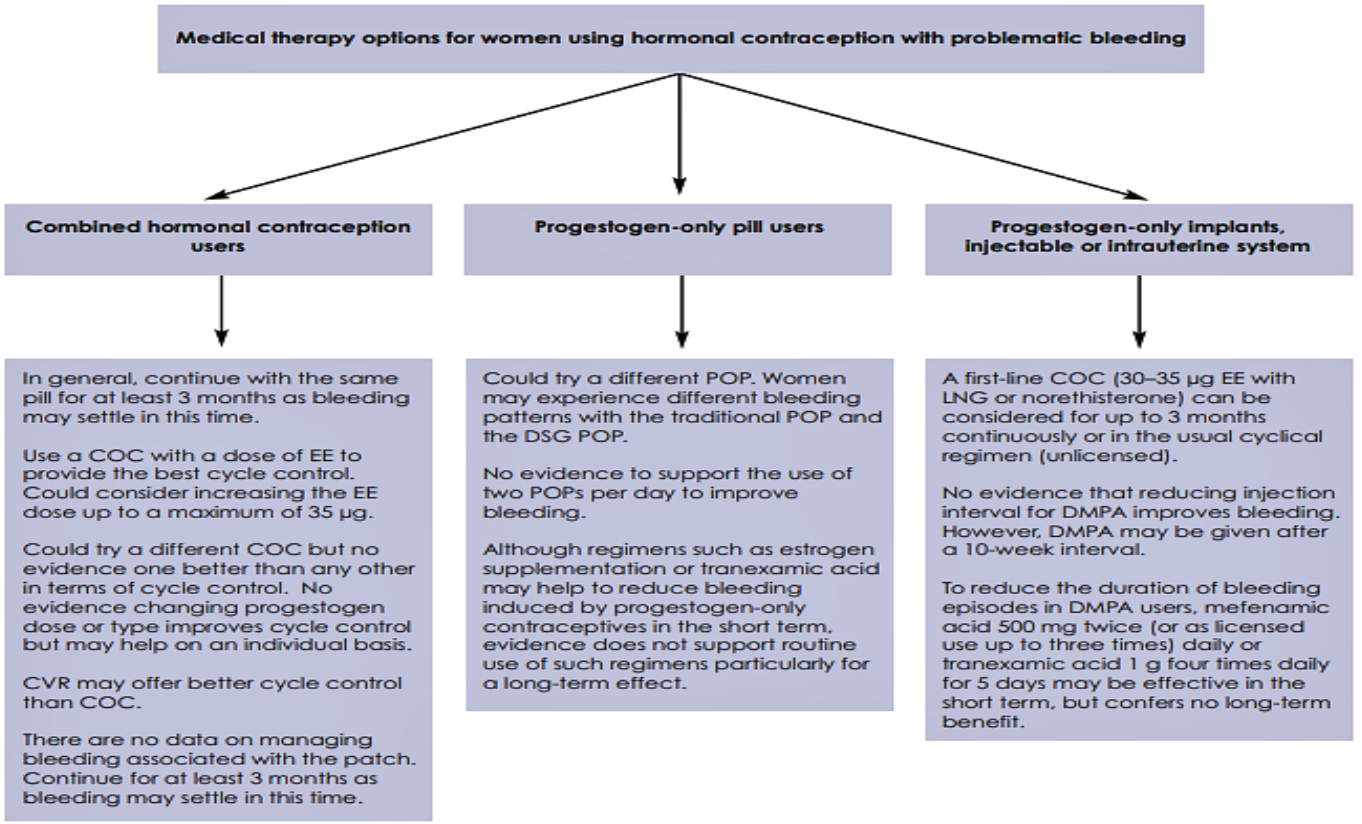
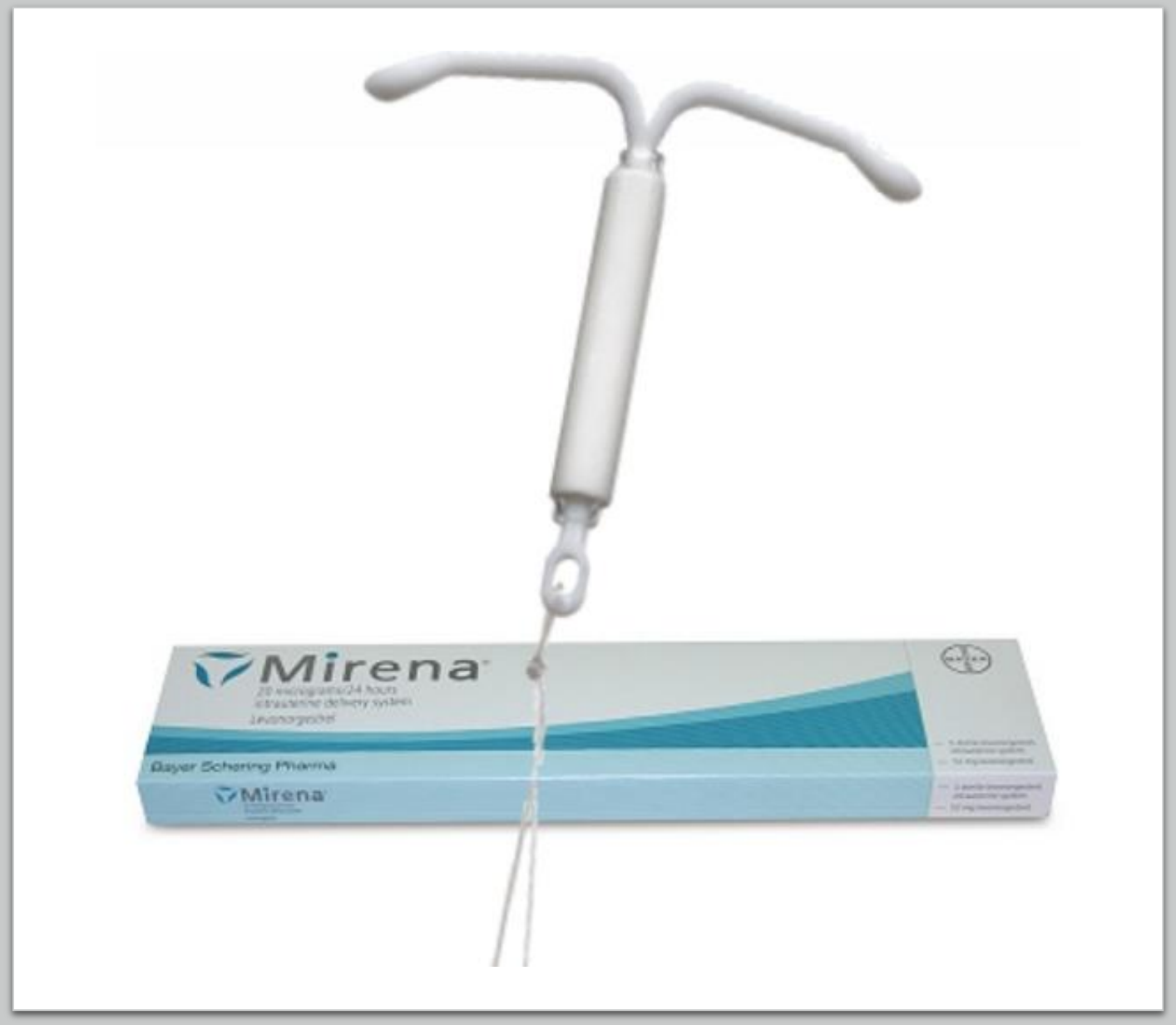


Figure 2 Medical therapy options for women using hormonal contraception with problematic bleeding. COC, combined oral contraceptive pill; CVR, combined vaginal ring; DMPA, depot medroxyprogesterone acetate; DSG, desogestrel; EE, ethinylestradiol; LNG, levonorgestrel; POP, progestogen-only pill.

IUS (Intrauterine systems)

- When inserted correctly, it's more than 99% effective.
- It can be taken out at any time by a specially trained doctor or nurse. It's possible to get pregnant straight after it's removed.
- It can make your periods lighter, shorter or stop altogether, so it may help people who have heavy or painful periods.
- It can be used by people who cannot use combined contraception (such as the combined pill) – for example, those who have migraines.
- Once the IUS is in place, you do not have to think about it.
- Some people may experience side effects, such as mood swings, skin problems or breast tenderness.
- There's a small risk of getting an infection after it's been fitted.
- It can be uncomfortable when the IUS is put in, but you can take painkillers after, if you need to.
- The IUS can be fitted at any time during your monthly menstrual cycle, as long as you're not pregnant.
- The IUS does not protect against sexually transmitted infections (STIs), so you may need to use condoms as well.
- **How it works**
- The IUS is similar to the intrauterine device (IUD), but instead of releasing copper like the IUD, it releases the hormone progestogen into the womb.
- It thickens the cervical mucus, which makes it more difficult for sperm to move through the cervix, and thins the lining of the womb so an egg is less likely to be able to implant itself.
- For some people, it can also prevent the release of an egg each month (ovulation), but most people continue to ovulate.
- If you're 45 or older when you have the IUS fitted, it can be left in until you reach the menopause or no longer need contraception.
- Licensed for 5 years but 4 if used for HRT
- Please remember to provide patient information
- https://patient.info/sexual-health/long-acting-reversible-contraceptives-larc/intrauterine-system



Who can use an IUS?

- Most people with a womb can use an IUS. A GP or nurse will ask about your medical history to check if an IUS is suitable contraception for you.
- The IUS may not be suitable if you have:
- breast cancer, or have had it in the past 5 years
- cervical cancer or womb (uterus) cancer
- liver disease
- unexplained bleeding between periods or after sex
- arterial disease or a history of serious heart disease or stroke
- an untreated sexually transmitted infection (STI) or pelvic infection
- problems with your womb or cervix
- **Using an IUS after giving birth**
- An IUS can usually be fitted from 4 weeks after giving birth (vaginal or caesarean). You'll need to use alternative contraception after the birth until the IUS is put in.
- In some cases, an IUS can be fitted within 48 hours of giving birth. It's safe to use an IUS when you're breastfeeding, and it will not affect your milk supply.
- **Using an IUS after a miscarriage or abortion**
- An IUS can be fitted by an experienced GP or nurse straight after an abortion or miscarriage. You'll be protected against pregnancy immediately.

Advantages of the IUS

- It works for 5 years or 3 years, depending on the brand.
- It's one of the most effective forms of contraception available in the UK.
- It does not interrupt sex.
- Your periods can become lighter, shorter and less painful – they may stop completely after the first year of use.
- It's safe to use an IUS if you're breastfeeding.
- It's not affected by other medicines.
- It may be a good option if you cannot take the hormone oestrogen, which is used in the combined contraceptive pill.
- It's possible to get pregnant as soon as the IUS is removed.
- There's no evidence that an IUS will increase the risk of cervical cancer, womb (uterus) cancer or ovarian cancer.

Disadvantages of IUS

- Disadvantages:
- Your periods may become irregular or stop completely, which may not be suitable for some people.
- Some people experience headaches, acne and breast tenderness after having the IUS fitted, but these usually settle with time.
- Some people experience changes in mood.
- An uncommon side effect of the IUS is that some people can develop small fluid-filled cysts on the ovaries – these usually disappear without treatment.
- An IUS does not protect you against STIs, so you may need to use condoms as well.
- If you get an infection when you have an IUS fitted, it could lead to a pelvic infection if it's not treated.
- Most people who stop using an IUS do so because of vaginal bleeding and pain, although this is less common.

Risks of th e IUS

- **Pelvic infections**
- There's a very small chance of getting a pelvic infection in the first few weeks after the IUS has been inserted.
- You may be advised to have a check for any existing infections before an IUS is fitted.
- See a GP if you've had an IUS fitted and you:
- have pain or tenderness in your lower abdomen
- have a high temperature
- have abnormal or smelly discharge
- **Rejection**
- There's a small chance that the IUS can be rejected (expelled) by the womb or it can move (displacement).
- If this happens, it's usually soon after it's been fitted. You'll be taught how to check that your IUS is in place.
- **Damage to the womb**
- In rare cases, an IUS can make a hole in the womb when it's put in. This may be painful, although there may not be any symptoms.

Thank you very much

Questions ?