



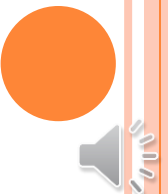
—BELMATT—  
HEALTHCARE TRAINING

# CONTRACEPTION AND SEXUAL HEALTH

DR HAYLEY JENKINS  
GP AND WOMEN'S HEALTH SPECIALIST

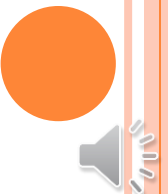
# AIMS OF SESSION

- To be able to offer women an effective choice consultation for contraception
- To be able to deal with simple contraception problems
- To have a brief insight into what's new in the contraception world



# CONTRACEPTION – WHY BOTHER?

- **50%** of unintended pregnancies occur in women not using any contraception in the month they conceive
- **4 in 10** women are using their method inconsistently/incorrectly
- Only **1 in 20** unintended pregnancies are attributable to method failure



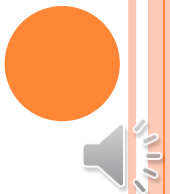
# GENERAL PRINCIPLES (1)

- ▶ Many individual factors affecting a couples choice of contraception
- ▶ Advice should be given on all methods that are medically eligible
- ▶ To be effective, contraception must be used consistently and correctly
- ▶ For long acting methods to be cost effective the continuation rate must be high



# UKMEC ELIGIBILITY CRITERIA

- ▶ 1 = A condition for which there is no restriction for the use of the contraceptive method
- ▶ 2 = A condition where the advantages of using the method generally outweigh the theoretical or proven risks
- ▶ 3 = A condition where the theoretical or proven risks usually outweigh the advantages of the method
- ▶ 4 = A condition which represents an unacceptable health risk if the contraceptive method is used



# COMBINED ORAL CONTRACEPTION

- Works primarily by inhibiting ovulation via it's action on the hypothalamo-pituitary axis, reducing LH and FSH
- Additional effects on the endometrium and cervical mucus
- **First 7 pills of a packet inhibit ovulation, the rest maintain anovulation**
- New guidance moved towards continual regimen



# COMBINED ORAL CONTRACEPTION

- ▶ Failure rate in perfect use 0.1% but in typical use averages at 5%
- ▶ The most used hormonal method. Can be used from menarche to **age 50** depending on risks
- ▶ Important potential harms which need to be assessed with all first prescriptions.
- ▶ Should not be given to smokers over 35 unless stop for over 1 year



# COMBINED ORAL CONTRACEPTION

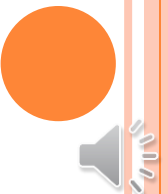
- ▶ Not recommended in women of any age if hx of migraine with aura. Not used in women >35 if migraine without aura
- ▶ Liver enzyme inducing drugs reduce the efficacy so consider alternatives.
- ▶ Not recommended if BMI >35 due to increased VTE and MI risk. Remember to ask about FH VTE in first degree relatives >45 years age





# PROGESTERONE ONLY PILLS

- SAFE FOR THE MAJORITY
- ONLY UKMEC 4 IS CURRENT BREAST CANCER



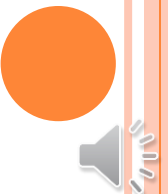
# MODE OF ACTION

- All POPs alter cervical mucus to prevent sperm penetration into the upper reproductive tract
- For some women ovulation is inhibited
- 60% on levonorgestrel, 95% on desogestrel
- Take same time every day with no pill-free interval. 99% effective if taken regularly, increases with age and parity



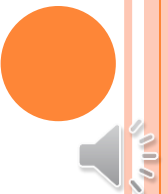
# MISSED PILLS

- >3hrs late (12hrs with desogestrel)
- Take late pill when remember and next pill at usual time. Barrier methods for next 48hrs
- Sex before missed pill is still protected



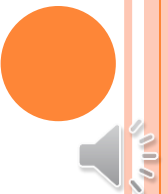
# SIDE EFFECTS

- Altered bleeding pattern
  - 2 in 10 no bleeding
  - 4 in 10 regular bleeding
  - 4 in 10 irregular bleeding
- 10-25% discontinue use at 1 year due to bleeding



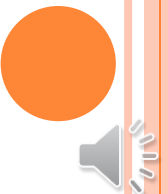
# FINAL POINTS

- Can continue until 55 years of age when natural loss of fertility can be assumed
- No longer any evidence to support the taking of 2 POPs a day if  $>70\text{kg}$
- No delay in fertility following discontinuation of POP



# DEPO - PROVERA

- Works primarily by inhibiting ovulation
- Thickening of cervical mucus inhibiting sperm penetration into the upper reproductive tract
- Also changes the endometrium making it unfavourable for implantation
- Introduction of new subcut version (Sayana Press) which allows self administration after teaching



# DEPO - PROVERA

- Failure rates if given regularly are  $<4$  in 1000 over 2 years
- No max duration of use, review every 2 years in over 40's. Can continue using until age of 50
- Causes a delay in fertility following discontinuation of up to 1 year, but no evidence of reduced fertility long term



# DEPO - PROVERA

- More cost effective than COCP after just 12 months due to reduction in number of unwanted pregnancies
- UKMEC 4 – CURRENT BREAST CANCER
- **No interaction with Liver Enzyme-Inducing drugs. This is especially important in patients on anti-epileptic drugs or St. Johns wort**





# INITIATION

- Day 1-5 of cycle for immediate cover. 7 days of additional contraception if any other time of cycle
- Return every 12 weeks but can be given after 10 weeks if needed. Can leave up to **14 weeks** without need for additional contraception



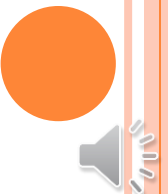
## SIDE EFFECTS (1)

- 80% have altered bleeding pattern
- Up to 70% amenorrhoeic at 1 yr of use
- Association between depo and weight gain, mean gain 3kg at 2yrs
- Data varies but up to 50% discontinue at 1 yr due to bleeding or weight gain



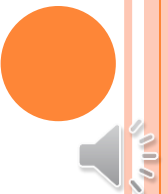
## SIDE EFFECTS (2)

- No proven association with mood change, libido, headache or cardiovascular disease
- Concerns on Bone Mineral Density if <18yrs and in older women. Recovers after discontinuation. Therefore review every 2 years and only use <18 or >40 if other methods unacceptable
- Reconsider use if any risks of osteoporosis



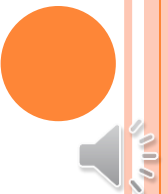
# IMPLANON

- Single sub dermal rod, licensed for 3 years
- Contains 68mg etonogestrel
- UKMEC 4 = current breast cancer



# IMPLANON

- Primary mode of action is inhibition of ovulation
- Also alters cervical mucus to prevent sperm penetration and inhibits normal endometrial development
- Pregnancy rate  $<1$  in 1000 over 3yrs, very few true failures



# IMPLANON

- ▶ No reduction in efficacy if BMI >30 so no restriction of use but manufacturers still suggest reviewing changing after 2 years
- ▶ No delay in fertility after removal
- ▶ Can use in migraine with or without aura unless develop new symptoms whilst using
- ▶ Efficacy affected by liver enzyme inducing drugs but not non liver enzyme inducing antibiotics



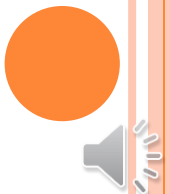
# SIDE EFFECTS

- ▶ Altered bleeding common.
- ▶ 20% get no bleeding
- ▶ 50% infrequent, frequent or prolonged bleeding
- ▶ 25% discontinue at 1yr, up to 43% by 3 yrs
- ▶ Acne can improve or worsen
- ▶ No causal association with weight change, mood change, reduced libido or headache



# INTRAUTERINE CONTRACEPTION

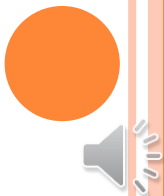
- ▶ Safe option for most women
- ▶ Need to consider STI risk and screening for Chlamydia and gonorrhoea prior to fitting
- ▶ UKMEC 4 = current PID, pregnancy, septic abortion, puerperal sepsis, cervical Ca, endometrial Ca, unexplained vaginal bleeding, anatomical distortion of uterine cavity e.g. Fibroids
- ▶ In addition IUS also CI in active liver disease/tumours, current breast cancer





# INTRAUTERINE CONTRACEPTION

- Efficacy determined by many factors such as sexual activity, age, parity
- In women who are high risk STI with no swab results antibiotic cover should be given e.g. Single dose 1g azithromycin
- TCU380 appears more effective than other copper IUDs
- At 5 years use failure rate <2% with TCU380 and <1% with IUS



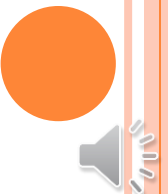
# INTRAUTERINE CONTRACEPTION

- ▶ TCU380 licensed for 10 years
- ▶ If inserted after age 40 can be retained until confirm menopause
- ▶ Mirena licensed for **5 years for contraception and menorrhagia, 5 years for endometrial protection in HRT**
- ▶ If inserted after age 45 provides effective contraception until 55 years. Can be retained until menopause is confirmed or until contraception no longer required



# COPPER IUD

- Copper is toxic to ovum and sperm and inhibits sperm penetration
- Works primarily by inhibiting fertilisation
- Endometrial inflammatory reaction which has an anti-implantation effect



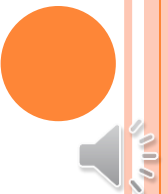
# MIRENA - IUS

- ▶ Effect mediated by progestogenic effect on the endometrium which prevents implantation
- ▶ Within 1 month of insertion high intrauterine concentrations of levonorgestrel (releases 20mcg day) induce endometrial atrophy
- ▶ Reduction in sperm motility and penetration through cervical mucus
- ▶ Has little effect on the hypothalamic-pituitary-ovarian axis so estradiol concentrations not reduced and majority continue to ovulate



# MIRENA – MAIN BENEFITS

- ▶ Overall reduced menstrual flow
- ▶ Reduced No. Bleeding days
- ▶ Less dysmenorrhoea and premenstrual syndrome
- ▶ Progestogenic arm of HRT
- ▶ Only contraception with separate license for menorrhagia
- ▶ Reduced need for hysterectomy
  
- ▶ “REVERSIBLE STERILISATION”



# JAYDESS/KYLEENA

- ▶ Licensed for contraception only
- ▶ Jaydess for 3 years and Kyleena for 5 years
- ▶ Smaller, narrower coil so easier to fit on nullips and young girls
- ▶ Lower doses of hormone – less likely to cause amenorrhoea (20%) but lighter bleeds generally
- ▶ Same fitting mechanism as Mirena



# NUVARING

- Combined contraceptive vaginal ring. Releases 15mcg ethinylestradiol and 120mcg etonogestrel a day. Same CI's currently as COCP
- Insert for 3 weeks and then 1 week without. Excellent cycle control
- Change for new ring each time
- Costs approx £9 month
- Only has 4 month shelf life once out of fridge so prescribe max 3 month supply



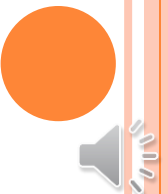
# EMERGENCY CONTRACEPTION





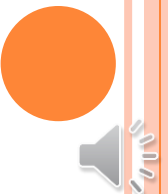
# Emergency contraception

- Levonelle can be given up to 72 hours post UPSI. It can be given after this time but patients need to know it is unlikely to be effective
- There is no limit to how many times a patient can have Levonelle in any one cycle
- Copper IUD can be inserted up to 5 days post UPSI, or 5 days after expected date of ovulation



# ELLA ONE

- Licensed for use up to 120hrs after UPSI.
- First line now in women over 70kg and those not on any progesterone 7 days before or 5 daysafter taking it
- Can also now be used more than once in a cycle
- Still not as effective as emergency IUD



# EMERGENCY IUD

- Copper IUD can be inserted up to 5 days post UPSI, or 5 days after expected date of ovulation
- Most reliable method of EC as working on preventing implantation rather than ovulation, so can be used effectively after ovulation has already occurred
- Provides a good method of ongoing contraception after
- Most patients decline due to invasiveness of procedure. Can be very uncomfortable on young girls who are nullips and mid cycle

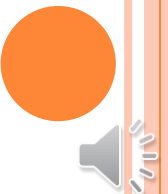


# Sexual Health

Causes of Vaginal Discharge

Management of common Vaginal infections

STI management



# Vaginal Discharge

- **Normal physiological vaginal discharge** is a white or clear, non-offensive discharge that can vary over time. For example:
  - It is thick and sticky for most of the menstrual cycle but becomes clearer, wetter, and stretchy for a short period around the time of ovulation.
  - It is heavier and more noticeable during pregnancy, with contraceptive use, and with sexual stimulation.
  - It decreases in volume at menopause due to a fall in oestrogen levels.



# Vaginal Discharge

- **Abnormal vaginal discharge** is characterized by a change of colour, consistency, volume, and/or odour, and may be associated with symptoms such as itch, soreness, dysuria, pelvic pain, or intermenstrual or post-coital bleeding.
- It is most commonly caused by infection; however, there can be non-infective causes.



# Vaginal Discharge

- **Vaginal infections**, such as:
  - Bacterial vaginosis (the most common cause of abnormal vaginal discharge) — caused by an overgrowth of anaerobic bacteria, particularly *Gardnerella vaginalis*
  - Vaginal candidiasis — caused by fungal infection with *Candida albicans*
  - Trichomoniasis (less common) — a sexually transmitted infection (STI) caused by the protozoan *Trichomonas vaginalis*.
- **Endocervical infections** caused by sexual transmission of chlamydia or gonorrhoea
  - The infection may remain localized causing cervicitis, or ascend to the upper genital tract causing pelvic inflammatory disease (PID).



# Vaginal Discharge

- **Noninfective causes :**
- A retained foreign body, such as a tampon, condom, or vaginal sponge.
- Inflammation due to allergy or irritation eg deodorants, lubricants, and disinfectants.
- Tumours of the vulva, vagina, cervix, and endometrium.
- Atrophic vaginitis in post-menopausal women.
- Cervical ectopy or polyps.
- Fistulae.
- Recent childbirth or vaginal surgery
- Physiological causes — the nature of physiological discharge can vary over time





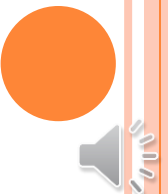
# Vaginal Discharge

- . **Take a detailed medical history:**
- **Ask about:** Characteristics of the discharge, onset, duration, colour, odour, consistency, and associated symptoms.
  - **Bacterial vaginosis (BV)** is characterized by a fishy-smelling, thin, grey/white homogeneous discharge that is not associated with itching or soreness.
  - **Vaginal candidiasis** is characterized by a white, odourless, curdy discharge that may be associated with vulval itching and superficial soreness.
  - **Trichomoniasis** is characterized by a fishy-smelling, yellow/green frothy discharge that may be associated with itching, soreness, and dysuria.
  - **Cervicitis or pelvic inflammatory disease (PID)** is characterized by vaginal discharge associated with post-coital or intermenstrual bleeding, dysuria, deep dyspareunia, or lower abdominal pain.



# Vaginal Discharge

- Any exacerbating factors (such as after intercourse).
- Any treatments tried (prescription or over-the-counter) and their effects.
- The use of vaginal products, such as douches, deodorant, and vaginal washes.
- Cyclical symptoms.
- Past medical history.
- Drug history, including contraceptive use.



# Vaginal Discharge

- The recommendation is to consider referring women at high risk of a STI or with characteristic features of trichomoniasis, cervicitis, or pelvic inflammatory disease (PID) to a genito-urinary medicine (GUM) clinic
  - *Chlamydia trachomatis* and *Neisseria gonorrhoeae* are cervical organisms, and the infection may remain localized causing cervicitis, or ascend to the upper genital tract causing PID.
  - Trichomoniasis is difficult to diagnose in primary care (and should always be treated in the GUM clinic).
  - Referral to GUM clinic will facilitate screening for other infections and partner notification (which is required for anyone with microbiologically confirmed gonorrhoea, chlamydia, or trichomoniasis).
  - The prescriber should take a thorough history and not simply rely on the woman's self-diagnosis.
  - Women with recurrent symptoms or those who fail to improve should be examined and investigated.



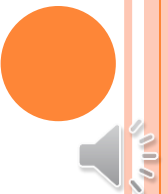
# Vaginal Discharge

- **Consider a suspected cancer pathway referral (for an appointment within 2 weeks)** for women with suspected gynaecological cancer
- **Arrange referral (for same day assessment) to a genito-urinary medicine (GUM) clinic for investigation and management** for women with suspected pelvic inflammatory disease (PID).
- **Management in primary care:**
  - **Manage infective causes of abnormal vaginal discharge.**
    - For women with suspected bacterial vaginosis or vaginal candidiasis, prescribe empirical antibiotic treatment.
    - For symptomatic women with cervicitis, treat for chlamydia while awaiting swab results)
    - For symptomatic women with suspected PID if same day treatment in a GUM clinic is not possible, prescribe empirical antibiotic treatment.



# Chlamydia

- If chlamydia is confirmed or suspected it is highly recommended to refer to GUM clinic
- If patient is unable or refuses to attend then swab and start treatment in primary care. No need to wait for swabs
- Treatment with Doxycycline 100mg BD for 7 days or Azithromycin 1g stat and then 500mg OD next 2 days if pregnant or intolerant



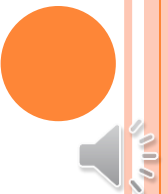
# Chlamydia

- Advise patient to avoid all SI (including oral) until after patient and partner have completed course of treatment ( or 7 days after azithro)
- Provide written info on chlamydia infection. A good patient info leaflet is available from BASHH
- Strongly advise screening for other STIs as often have more than one at a time
- If result comes back positive should be referred to GUM for partner notification



# Gonorrhoea

- STI caused by *Neisseria Gonorrhoeae*.
- Uncomplicated localised and primarily affects the mucous membranes of the urethra, endocervix, rectum, pharynx and conjunctiva
- In women can test for GC on same swab as chlamydia
- Treatment is with Ceftriaxone 1g IM stat so better to refer to GUM
- Requires partner notification and test for other STIs



# Trichomonas

- STI caused by flagellated protozoan *Trichomonas Vaginalis*
- Most common non viral STI
- Ideally should be treated in a GUM clinic. If refuses then patient info available from FPA (*trichomonas vaginalis* – looking after your sexual health)
- Treat with metronidazole oral 400-500mg BD for 5-7 days
- Treat current partner simultaneously and any other partners in last 4 weeks
- Refrain from SI for at least 1 week until both treated





# Genital Herpes

- Consider diagnosis with any new painful genital ulcers
- Commence oral antivirals within 5 days of start of symptoms
- Caused by HSV, usually type II but can be type 1
- Treat with oral acyclovir 400mg TDS for 5-10 days or 200mg 5 times a day for 5-10 days
- Consider local anaesthetic cream/gel to help with the pain

