Obstetrics & Gynaecology - Topic 21 - Contraception

Choosing Contraception

Principles of a Good Consultation

Voluntary Choice and Relevant History

- Contraception helps people decide whether and when to become pregnant, and the method should be chosen voluntarily according to their needs.
- Ask about future pregnancy plans, menstrual pattern, medical conditions, medicines, breastfeeding, sexually transmitted infection risk and previous experiences with contraception.
- Discuss effectiveness, reversibility, side effects, duration, cost, privacy, ease of use and access to removal or follow-up.

Pregnancy Exclusion, STI Prevention and Eligibility

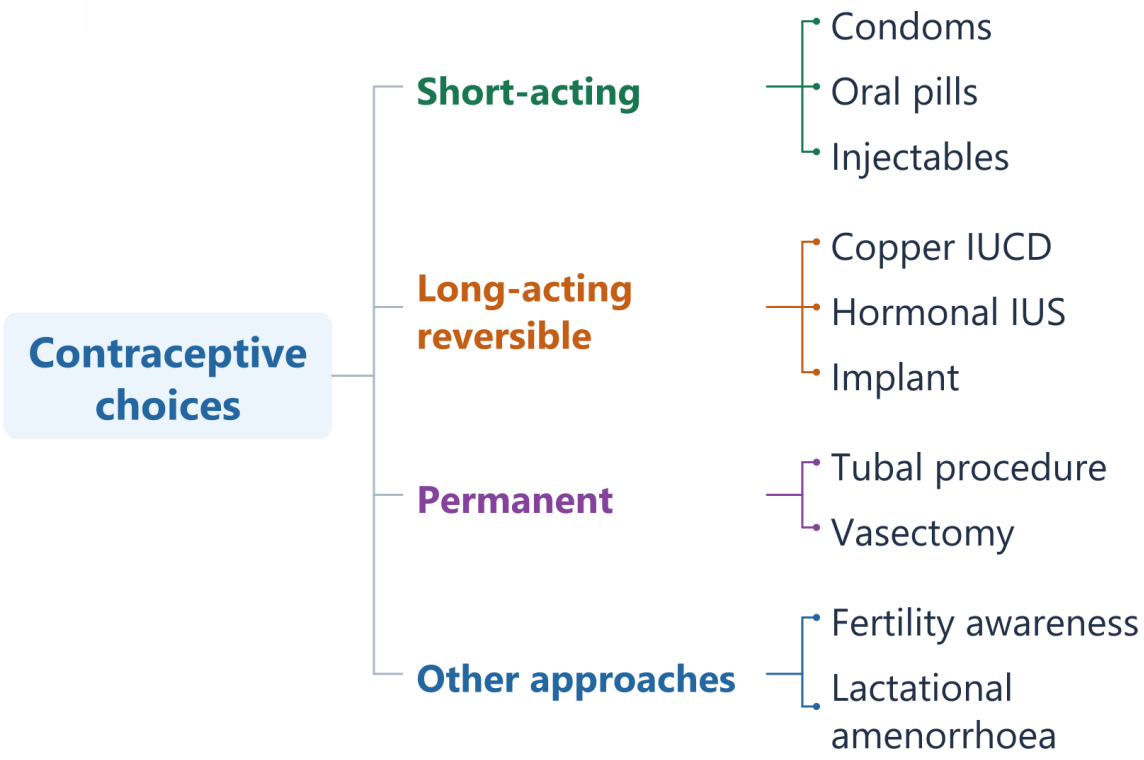
- Confirm that pregnancy can reasonably be excluded before starting a method when this is required, and assess recent unprotected intercourse for emergency contraception.
- A negative test very soon after intercourse cannot exclude a pregnancy from that exposure, so history and the timing of testing matter.
- Explain that condoms reduce sexually transmitted infection risk, while most other contraceptive methods provide pregnancy prevention only.
- Use a medical eligibility framework to match the method to the person's condition rather than imposing unnecessary tests or restrictions.

Medical Eligibility Categories

- Category 1 means that there is no restriction for the condition being considered, and category 2 means that benefits generally outweigh theoretical or proven risks.
- Category 3 means that risks usually outweigh benefits, while category 4 means an unacceptable health risk and the method should not be used.
- The category is specific to the method and condition, and initiation may differ from continuation when a new problem arises.
- The same person may be unsuitable for an oestrogen-containing pill but eligible for a copper IUCD or a progestogen-only method.

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Overview of Contraceptive Methods



Understand Failure Rates

Typical Use, Perfect Use and Method Context

- Perfect-use effectiveness describes correct, consistent use, whereas typical use includes missed pills, late injections and other real-life difficulties.
- The figures below are approximate pregnancies per 100 users during the first year, and estimates vary by product and population.

Method	Approximate typical-use pregnancies per 100 users in one year
Implant	0.1
Levonorgestrel IUS	0.1–0.4, depending on product
Copper T IUCD	0.8
Progestogen injection	4
Oral contraceptive pills	7
External condom	13
Female sterilisation	0.5
Vasectomy after appropriate clearance	0.15

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- Long-acting reversible methods have little difference between typical and perfect use because they do not depend on daily action.
- Lactational amenorrhoea effectiveness refers only to the first six months while all eligibility conditions remain satisfied, so it cannot be compared directly with a full-year figure.

Pearl Index and Comparison Limits

- The **Pearl index** expresses pregnancies per 100 woman-years of exposure to a method.
- It is calculated as the number of pregnancies multiplied by 1,200 and divided by the total woman-months of exposure.
- Different populations, follow-up periods and methods of handling discontinuation can affect comparisons, so a failure figure needs its context.

Temporary Methods

Barrier and Behavioural Methods

1. External and Internal Condoms

- An external condom creates a barrier that prevents semen from entering the vagina and reduces transmission of many sexually transmitted infections.
- Use a new condom for every act, check the packet and expiry date, apply it before genital contact and leave space at the tip as instructed.
- Use a suitable lubricant, avoid oil-based products with latex and hold the base during withdrawal to reduce slippage.
- An internal condom is an alternative barrier, but it should not be used simultaneously with an external condom because friction can increase failure.
- Breakage or slippage requires assessment for emergency contraception and infection-related care according to the exposure.

2. Diaphragms, Cervical Caps and Spermicides

- A diaphragm or cervical cap covers the cervix and is used with a suitable spermicide according to the product instructions.
- Correct fitting, placement and the required interval before removal are essential for effectiveness.
- Local irritation and urinary infection can occur, and these methods are less reliable in ordinary use than long-acting contraception.
- Spermicides used alone have relatively high failure rates and do not protect against HIV or other sexually transmitted infections.

3. Fertility Awareness and Withdrawal

- Fertility-awareness methods identify potentially fertile days using cycle patterns, cervical secretions or temperature, and require training and consistent behaviour.

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- Irregular cycles, postpartum changes and difficulty avoiding unprotected intercourse during fertile days reduce reliability.
- Withdrawal depends on correct timing before ejaculation and has a higher typical-use failure rate than many other methods.
- Neither approach protects against sexually transmitted infections.

4. Lactational Amenorrhoea

- This method requires a baby younger than six months, no return of menstruation and fully or nearly fully maintained breastfeeding day and night.
- Introduce another method as soon as any criterion is no longer met, because ovulation may precede the first period.

Combined Hormonal Contraception

Mechanism and Use

Mechanism and Product Schedules

- Combined methods contain an oestrogen and a progestogen, and their main contraceptive action is suppression of ovulation.
- They also thicken cervical mucus and alter the endometrium, contributing to pregnancy prevention.
- Combined oral pills are taken according to their active-tablet and hormone-free schedule, while patches and vaginal rings have product-specific schedules.
- A common pill pack contains 21 active tablets followed by a seven-day break or seven inactive tablets, but other schedules exist.

Starting Instructions, Assessment and Benefits

- Check blood pressure and relevant history before prescribing, and provide clear start, backup and missed-dose instructions for the selected product.
- For a standard combined pill, starting within five days of the onset of menstruation provides immediate protection; a later start requires seven days of condoms or abstinence after pregnancy has been reasonably excluded.
- Benefits may include lighter, less painful periods, improved cycle control and improvement in acne for some users.

Side Effects and Important Contraindications

Common Side Effects

- Nausea, breast tenderness, headache and breakthrough bleeding can occur, especially during the first months.

Thrombotic and Other Important Contraindications

- Oestrogen increases thrombotic risk, so previous thrombosis, certain thrombophilias, major immobilisation and other vascular risks require careful eligibility assessment.

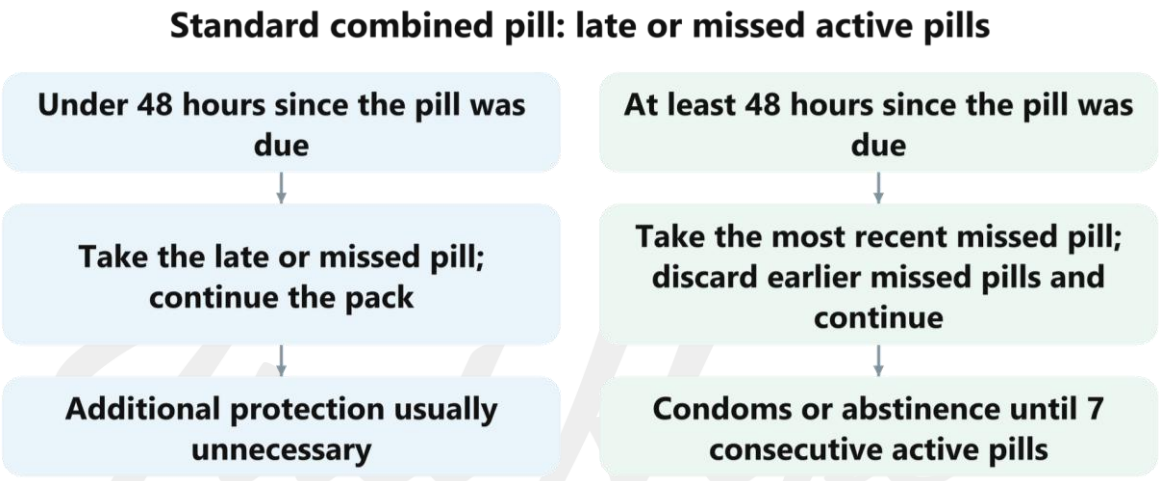
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- Migraine with aura, severe hypertension, important vascular disease, current breast cancer and some severe liver disorders make combined methods unsuitable.
- Smoking at age 35 or older increases cardiovascular risk, and the smoking amount influences the eligibility category.
- Combined methods are restricted early after delivery, with additional considerations during breastfeeding.

Enzyme-Inducing Drug Interactions

- Enzyme-inducing medicines such as rifampicin and some antiseizure drugs can reduce hormonal contraceptive effectiveness, so review interactions and offer an appropriate alternative.

A Practical Missed-pill Approach



With 2 or more missed pills: first-week exposure may need emergency contraception; last-week misses require skipping the hormone-free interval. Check the actual product

A. One Late or Missed Active Pill

- For a standard combined pill, take one late or missed active pill as soon as remembered and continue the remaining tablets at the usual time.
- This branch applies when fewer than 48 hours have passed since the pill was due; additional contraceptive protection is usually unnecessary.

B. Two or More Consecutive Missed Active Pills

- When at least 48 hours have passed since an active pill was due, take the most recent missed pill promptly, discard earlier missed pills and continue the pack.
- Use condoms or avoid intercourse until seven consecutive active pills have been taken correctly.
- If the missed pills were in the last active week, omit the usual hormone-free interval and begin the next pack as instructed.
- If pills were missed in the first active week and unprotected intercourse occurred in the previous five days, consider emergency contraception and its interaction with restarting hormones.

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