Gynaecology

Jodi Keane
Manda Raz
Shavi Fernando

pocket tutor



Contents

Preface *v*
Acknowledgements *ix*

Chapter 1 First principles
1.1 Introduction 1
1.2 Normal (embryological) development of the genital tract 1
1.3 Pelvic anatomy 6
1.4 Normal menstrual cycle 19

Chapter 2 Clinical essentials
2.1 Introduction 25
2.2 History 25
2.3 Examination 32
2.4 Investigations 37

Chapter 3 Puberty and congenital disorders
3.1 Introduction 43
3.2 Clinical scenario 43
3.3 Physiology of normal puberty 45
3.4 Physiology of normal female genital development 50
3.5 Disorders of puberty 52
3.6 Congenital abnormalities of the female genital tract 61

Chapter 4 Disorders of the menstrual cycle
4.1 Introduction 67
4.2 Clinical scenario 67
4.3 Menstrual cycle disturbance 69
4.4 Pelvic pain 98

Chapter 5 Genital diseases
5.1 Introduction 113
5.2 Clinical scenario 113
5.3 Sexually transmitted infections 115

5.4 Pelvic inflammatory disease 119
5.5 Common non-sexually acquired infections 124
5.6 Lichen sclerosis and other vulvar dermatoses 129

Chapter 6 Reproduction
6.1 Introduction 135
6.2 Clinical scenario 135
6.3 Contraception 136
6.4 Infertility 151
6.5 First trimester bleeding 160
6.6 Recurrent pregnancy loss 170
6.7 Termination of pregnancy 172
6.8 Violence against women and informed consent 175

Chapter 7 Menopause
7.1 Introduction 177
7.2 Clinical scenario 177
7.3 Physiology of menopause 179
7.4 Clinical features and investigations 182
7.5 Sequelae 185
7.6 Treatment of systemic symptoms 187
7.7 Treatment of genital symptoms 194

Chapter 8 Pelvic organ prolapse and urinary dysfunction
8.1 Introduction 197
8.2 Clinical scenario 197
8.3 Pelvic organ prolapse 199
8.4 Urinary incontinence 207
8.5 Recurrent urinary tract infection 218

Chapter 9 Principles of gynaecological oncology
9.1 Introduction 221
9.2 Clinical scenario 221
9.3 Principles of cancer staging and treatment 224
9.4 Human papillomavirus-dependent malignancy (vulva, vagina and cervix) 226
9.5 Uterine cancers 238
9.6 Ovarian cancer 244

Index *251*

chapter 2

Clinical essentials

2.1 Introduction

The gynaecological history and examination consist of a combination of general medical and surgical assessment together with a more specific and targeted gynaecological (and obstetric) appraisal.

A thorough history is important as it guides physical examination and these both, in turn, guide the selection of appropriate investigations. This then follows naturally into arriving at the correct diagnosis and planning optimal management and clinical care.

Clinical insight

The axiom 'history is 80% of the diagnosis' holds true in most of medicine including gynaecology and obstetrics and it is well worth perfecting this skill as you will be more clinically efficient, accurate and provide better care.

2.2 History

The principles of history taking in gynaecology are, in addition to standard medical and surgical history items, to capture coherently the spectrum of potential gynaecological complaints, assess well woman care including breast, cervical and other screening, discuss fertility control and plans and treat complications of natural events such as the menopause.

The sensitive nature of some gynaecological problems means they are not always disclosed. Both skill with discussing such matters, a tactful approach and attention to non-verbal cues are helpful in maximising your history taking. This should routinely include interviewing women in private to ensure they have the opportunity to discuss concerns freely, disclose past terminations or sexually transmitted infections and ensure they are safe from coercion, physical or sexual abuse. This can often be completed when examining under the guise of privacy without creating discord with the support person.

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Building rapport

Building rapport with women is essential when history includes intimate items such as in gynaecology where routine enquiry regarding menstruation, sexual function, sexual pain, vaginal discharge and genital symptoms are routine.

Be guided by the woman's preference for a support person during her interview. Any partner or support person should be involved at the request of the woman and the woman is entitled to privacy from companions, if this is her preference. Be aware that in certain 'sensitive' situations, it may not be appropriate for the woman's intimate partner to attend (e.g. sexual assault). Rapport is achieved verbally and non-verbally.

- *Verbal rapport* is built by using the woman's name and repeating some of what she has said to indicate that you have been listening. This might include repeating the symptoms they described back to them.
- *Non-verbal* rapport refers to appropriate body language including handshaking, nodding and gesturing.

Allow adequate time for the woman to state her concerns, do not be afraid to listen as rarely will a woman talk for so long as to delay your consultation and time is often saved as the woman will feel her concerns have been acknowledged and this allows the history to move onto other elements without resistance.

Always explicitly state the history given is held in confidence unless the woman requests you disclose to another party with the exception of where legal reporting is mandatory.

Age

Age impacts significantly on formulating a differential diagnosis. Younger women, for example, are more likely to have menorrhagia (heavy periods) due to functional/hormonal issues and older women due to structural problems in the uterus such as fibroids or adenomyosis.

It also helps to inform what issues may be important for the woman. For example, a young teenager will be more interested in contraception than advice about infertility and a post-menopausal woman will not be interested in discussing contraception. Also, as age increases, issues around fertility become significant for women in their reproductive years.

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Presenting problem

The presenting problem (or complaint) is the reason the woman seeks your help. It is a free statement usually given at the start of the consult. A common example is 'my periods are too heavy.'

This is always considered a symptom (i.e. not a diagnosis and not a clinical sign you identify on examination), which you will need to characterise to identify potential causes (differential diagnoses) by application of directed questions.

In order to facilitate a focussed and directed assessment of the patient, a detailed history of their presenting problem needs to be elicited. This will then allow a more detailed exploration of their symptoms and possible causes.

Guiding principle

Symptoms, signs, investigations, diagnoses and differentials are not interchangeable terms. Using them correctly enhances the clarity of your clinical documentation and handover and gives an impression of competence.

A symptom is a problem the patient reports. A sign is a finding that you identify on examination and a diagnosis is the pathological cause of the symptom and/or sign after appropriate investigation.

Investigation is sometimes not required to make the diagnosis or may be minimal or extensive depending on the problem suspected (differential diagnosis).

Clinical insight

Questions that can be used to clarify their symptoms are (WWQQAAB):

- **W**hen (does the symptom present)?
- **W**here (is the symptom)?
- **Q**uality (of the symptom)?
- **Q**uantity (of the symptom)?
- **A**lleviating factors (does anything make the symptom improve)?
- **A**ggravating factors (does anything make the symptom worse)?
- **B**eliefs (what does the patient think her symptom is due to)?

Gynaecological history

Menstrual history

Ask about the date of the first day of the last menstrual period (LMP).

The LMP is used to estimate which phase of their menstrual cycle in the woman is currently in (follicular/proliferative phase or luteal/secretory phase).

Also ask regarding the age of menarche (the age of their first period) and/or the age of menopause (if applicable). This can help to identify risk factors for some gynaecological conditions,

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Clinical insight

There is a wide variety of 'normal.' Abnormality can only be established, if the patient is concerned or their life is affected by the variation – always treat the woman and not just the number.

Of course, if there is an associated major pathology, e.g. carcinoma, this is abnormal regardless of quality of life currently due to the health implications without treatment.

e.g. women who have early menarche and late menopause have a higher risk of endometrial carcinoma.

It is important to identify the characteristics of menstrual bleeding, in particular, regularity, heaviness and pain. A 'normal' menstrual cycle should be 28 days long and regular, with 3–5 days of bleeding in most cases. It should not be painful or heavy enough to affect day-to-day activities. In addition, there should not be any bleeding or pain between periods.

Regularity

Irregular periods are most commonly linked to polycystic ovarian syndrome, other causes uncommonly include thyroid disorders, benign pituitary tumours, adrenal gland dysfunction, and central (hypothalamic causes). The presence of an irregular cycle can also make it more difficult to conceive as a woman may not be ovulating regularly or at all.

Bleeding pattern and duration

Menstrual bleeding <2 days or >7 is defined as abnormal. The upper limit of normal blood loss is considered to be 80 mL.

However, as it is usually impracticable to measure the volume of menstrual loss, heavy bleeding is best regarded as bleeding the woman finds particularly inconvenient or associated with iron deficiency or anaemia.

Ask about other vaginal bleeding including inter-menstrual or post-coital bleeding, which can indicate cervical disease or endometrial pathology.

Excessive menstrual bleeding causes chronic anaemia, which should be treated with iron-rich diet and oral iron supplementation and the reason for the heavy menses corrected.

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Cervical screening

Ask the woman if she is due for cervical screening.

This may be a Pap smear or human papillomavirus (HPV) deoxyribonucleic acid (DNA) test depending on the healthcare system.

Also enquire if she has ever had abnormal screening or treatment for cervical dysplasia in the past as this increases her chance of future problems.

It is useful to enquire regarding HPV vaccination as an automatic accompaniment as you are less likely to forget this item this way and can recommend vaccination in eligible women.

Contraception/hormonal treatments

Always ask regarding current contraception method, compliance, acceptability and side effects. It is important to also enquire about desires for future fertility, as this changes your treatment options and is an opportunity for preconception care, counselling and folate supplementation.

Contraceptive methods include non-hormonal, hormonal and barrier methods of contraception (refer to Chapter 6).

If the woman is peri-menopausal (has menopause symptoms but still some periods) or menopausal (has had no menstrual periods in 12 months in the absence of pregnancy or other pathology), also enquire regarding use of herbal, complementary and prescribed menopause hormonal therapy [hormone replacement therapy ('HRT')]. This may highlight other areas of their health that need addressing such as menopausal symptoms and is an opportunity for health education.

Sexual history

Enquire about previous episodes of sexually transmitted infections (STIs), pelvic inflammatory disease (PID) and their treatment.

Untreated or chronic STIs lead to adhesions and scarring of the fallopian tubes, uterine and pelvic cavity, contributing to ectopic pregnancy and chronic pain. Routinely offer screening for chlamydia and gonorrhoea to women <25 years old as STI is common in this population (estimated up to 5%).

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Guiding principle

Learning new history items can be difficult and long lists commit poorly to memory. Mnemonics, by grouping bigger lists into smaller chunks, maximise your ability to retain complex lists efficiently and use them well.

Guiding principle

Any woman who has had major abdominal open surgery, in particular midline laparotomy, is at high risk of intra-peritoneal adhesions. This can increase the risk of damaging abdominal structures during any further surgery and changes both threshold for repeat surgery and technical factors around conduct.

As a part of the sexual history, it is important to identify if the woman is sexually active and in a safe and supportive relationship meaning not subject to emotional, financial, physical or sexual abuse. This line of questioning should occur without anyone else present in the consultation. Violence against women is more prevalent than many think and is an essential issue in the holistic management of women.

Medical history

Enquire about any condition requiring specialist input or active treatment. This includes any serious or severe respiratory, cardiac or renal disease as these alter your treatment options in many cases.

Surgical history

Enquire specifically about open and laparoscopic abdominal operations (e.g. bowel surgery, appendicectomy, cholecystectomy) and issues with general anaesthesia, such as allergies or intubation difficulties, due to morbid obesity or a narrow pharynx. These all also affect the best treatment option for the woman's presenting problem and allow you to assess safety of potential further surgery.

Medication history

In addition to recording regular medications, enquire specifically regarding:

- Analgesics, in particular opiate analgesia. Women with chronic pelvic pain often resort to opiate analgesia to manage their pain. This is not always appropriate as

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opiates do not treat pelvic pain effectively and are addictive. Chronic pelvic pain always needs to be managed in a multidisciplinary fashion involving chronic pain specialists, psychologists, gynaecologists and sometimes sexual health specialists
- Anticoagulants such as low-molecular-weight heparin or warfarin. These become relevant when considering menorrhagia as well as when planning operative intervention
- Antidepressants, including selective serotonin reuptake inhibitors. These may provide clues to a woman's mental state, but also may contribute to urinary dysfunction

Obstetric history

Enquire about all pregnancies including the number of terminations, miscarriages, ectopic pregnancies, live births and mode of delivery. This will help to inform further history taking and will highlight additional surgical history and fertility background (see Pocket Tutor Obstetrics).

Family history

Enquire regarding heritable gynaecological conditions. These include but are not limited to fibroids, infertility, recurrent miscarriage, gynaecological cancers and gynaecological surgery for benign indications.

Refer for genetic counselling if there is suspicion of a genetic condition which may increase the chance of familial cancers, e.g. BRCA mutation and ovarian cancer.

Social history

Living circumstances and finances have direct impact on the health of women. Drinking alcohol, smoking and illicit drug use are associated with mental health disorders, chronic pelvic pain and domestic violence.

Good practice point

Document each pregnancy in chronological location with year, place of birth, mode of birth, birthweight and complications. Generate a list of 'Gs and Ps', which are gravida (all pregnancies, regardless of outcome) and parity, all deliveries after 20 weeks' of gestation. Multiple pregnancies are denoted by a '+' and a stillbirth (after 20 weeks or birth weight <500 g) is denoted with a '–.'

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Smoking also increases the risk of all gynaecological cancers.

Non-pharmacological methods (e.g. counselling and support group meetings), pharmacological agents (e.g. nicotine patches for smokers) or a combination of both are utilised to help affected women.

The social history is also important when planning care as women with financial issues will not be able to afford a costly therapy and those with limited home supports or physical disability may need rehabilitation post-operatively.

2.3 Examination

Examination consists of general and gynaecological components.

General examination starting with vital signs, is focussed on detecting haemo dynamic stability, thyroid dysfunction, anaemia and abdominal palpation for masses. Gynaecological examination involves inspection of the external genitalia, speculum examination of the vagina and cervix and bimanual pelvic examination.

Start your examination with three steps (ICE):

1. *Introduction*: Introduce yourself by name and position
2. *Consent*: Obtain consent to examine the woman and chaperone, if appropriate
3. *Explanation*: Explain what you are going to do as part of your examination

General examination

The general inspection begins when the woman enters the consultation room. There are four components summarised in the acronym ABCD:

1. *Appearance*: Observe the woman for the following signs:
   - Pallor indicating anaemia
   - Dysmorphic features indicating an underlying chromosomal condition
   - Neck goitre indicating hyper- or hypothyroidism
   - Discomfort or pain
2. *Body habitus*: Notice if the woman is of normal body mass index (BMI) [weight (kg)/height (m^2)]. Increased BMI is

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linked to polycystic ovarian syndrome, endometrial hyperplasia/cancer and surgical morbidity. On the other hand, below average BMI is associated with amenorrhoea.

3. *Cognition*: Is the woman oriented or, as a result of severe mental or physical illness, disoriented to time, place and person?
4. *Devices/Drugs*: Does the woman have any medications with her? Does she use any treatment devices or mobilisation aids?

Vital signs

The vital signs include blood pressure, heart rate, respiratory rate, oxygen saturation and temperature.

Abdomen

Examine for a palpable fundus by placing your fully extended hand on the abdomen and use the palm and palmar surface of the fingers to identify the location, size and consistency of the fundus. A normal uterus is not palpable abdominally; however, if enlarged by a fibroid, for example, it may be palpable at a level that is even above the umbilicus.

Good practice point

A complete gynaecological examination involves the vagina and maintaining the woman's dignity is important. This can be achieved by clearly explaining what you plan to do and why, as well as offering for a chaperone to be present during the examination.

Always start your examination with less sensitive parts of the body (e.g. general and abdominal examination) as this helps patient comfort.

When examining the vulva and vagina, other body parts should always remain covered, curtains closed and doors secured to prevent inadvertent intrusion to help put the woman at ease. Similarly, an examination couch that points away from the door increases reassurance. She should be allowed the opportunity to halt the examination if and when she desires.

Clinical insight

Young women will compensate for large volumes of blood loss for quite some time before their vital signs become abnormal.

For example, be highly suspicious of a woman with a positive pregnancy test, acute abdomen (significant pain with rebound and guarding) and tachycardia, even if her blood pressure is normal.

This woman may have a ruptured ectopic and waiting until the blood pressure is low to intervene increases her morbidity, risk of mortality and laparotomy over laparoscopy.

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Clinical insight

Always observe the woman's face for any grimacing when performing a potentially painful examination such as abdominal or bimanual palpation. This is not only important to ensure the woman's comfort, but also to accurately identify source and location of pain.

Next, note any surgical scars and ensure all have been accounted for in the clinical history. Look for organomegaly or masses, then examine the uterine wall and borders. Irregularities in the wall may also be caused by fibroids. If suspicious of intra-abdominal or intra-uterine pathology, palpate the abdomen to establish if there is a region of tenderness with rebound (pain upon removal of pressure) or guarding (involuntary contraction of the abdominal wall to touch) – these indicate peritoneal irritation from the presence of blood or pus.

Pelvis

As the pelvic organs, including the cervix (the opening of the uterus), are internal, visual inspection requires examination with a retraction device called a speculum. There are a number of different types of speculums for different purposes (**Figure 2.1**). Speculums are essential to observe the appearance of the cervix, perform a cervical screening test and to take high vaginal and endocervical swabs.

The pelvic organs (uterus, tubes and ovaries) are situated deep within the pelvis. This means that palpating normal pelvic organs is not possible with an abdominal examination only. Furthermore, normal pelvic organs are mobile and adequate palpation is also not possible with a digital vaginal examination alone. Therefore, in order to adequately assess the pelvic organs, a bimanual vaginal examination is required as this fixes the organ between your hands.

When both a speculum and bimanual examination are required, perform the speculum examination first so as not to disrupt the vaginal or cervical environment in case of the need to sample cervical cells or vaginal discharge.

Speculum examination

The examination is performed with either clean (most examinations) or aseptic (where sterility is required – rare in

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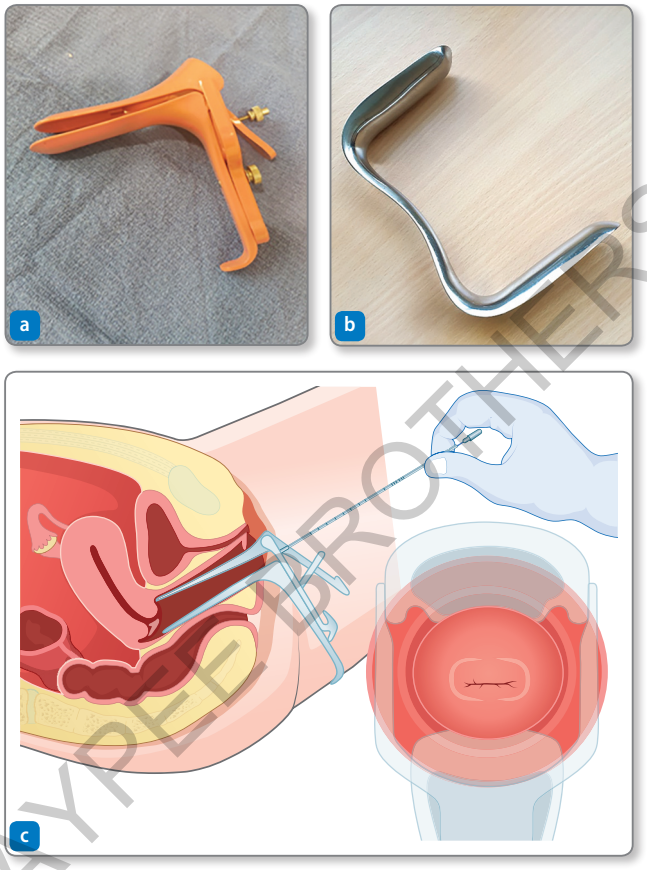

Figure 2.1 Common types of speculum. (a) Bivalve speculum; (b) Sims speculum and (c) Using a bivalve speculum.

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gynaecology outside of an operating theatre) technique and by using an appropriately sized bivalve speculum (**Figure 2.1a**). A Graves speculum is wider and the edges are curved outwards. This is used in multiparous women, whereas a straighter, narrower, Pederson speculum is used in women who have not had a vaginal birth. Verbal consent is obtained and a chaperone is

Clinical insight

Ensure that the pillow or rolled up towel is placed under the woman's bottom, not under the small of her back. Placing the pillow under the bottom helps to align the vaginal canal and tilt the pelvis forwards, making visualisation of the cervix easier. If placed under the small of the back, the pelvis is tilted further backwards, making visualisation of the cervix difficult.

Clinical insight

In the past, examiners may have asked women to place their closed fists under their bottom to facilitate pelvic elevation. This is no longer recommended as this position is 'submissive' and lacks dignity. In addition, many women are unable to reach the correct position on their bottom to achieve adequate elevation.

Clinical insight

Cervical motion tenderness, formerly known as 'cervical excitation,' is positive when the patient reacts with extreme pain, withdrawing rapidly from the examiner after gentle cervical manipulation. This is indicative of significant pelvic inflammation or irritation, which may be seen with tubo-ovarian abscess or haemoperitoneum due to, for example, a ruptured ectopic pregnancy. It is analogous to rebound and guarding and occurs because the broad ligament, composed of folded pelvic peritoneum, is placed on tension by moving the cervix.

offered. The woman is asked to lie in a supine position with her bottom elevated off the examination table. Such elevation can be achieved with either a pillow or rolled up towel.

Water-based lubricant is applied to both valves of the speculum with a gloved finger. The labia are parted and the speculum is rested on the posterior vaginal fourchette with gentle downwards pressure. It is then tilted downwards on a 45° angle and the speculum gently introduced into the vagina to the length of the speculum. It is then slowly opened under vision; the cervix identified and then moved into complete view. The speculum is locked in position with a locking mechanism (generally either a valve or screw on the base), cervix inspected and any cervical sampling or swabs are taken. The speculum is then gently removed after the locking mechanism is released.

Bimanual vaginal examination

A bimanual examination is performed with the index finger and middle finger of

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Gynaecology

pocket tutor: Gynaecology provides a fundamental grounding in the area of gynaecology. A perfect partner to **pocket tutor: Obstetrics**, this book outlines the basic approach to a gynaecological history and examination, and essential pelvic anatomy and continues to describe the physiology and pathology that surrounds women at all stages of life including puberty and menstruation, reproduction and genital diseases, menopause and pelvic organ prolapse as well as gynaecological oncology. Disorders are accompanied by medical images, practical artworks and summary tables. These allow finger-tip access to commonly encountered clinical situations, focussing on those most likely to be experienced at a medical student and junior doctor level.

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