

Figure 1.1 Doctor's checklist

Pulse	Blood pressure	Temp	Resp. rate	O ₂ sats	Pain score
Past history		Drug history		Allergy	
Presenting complaint(s)					
History of presenting complaint					
Examination					
Differential diagnosis/ working diagnosis			Plan – advice and communications – medication – follow-up/safety net		

Figure 1.2 SOCRATES

SOCRATES pain history (Sudden onset central chest pain 9/10)

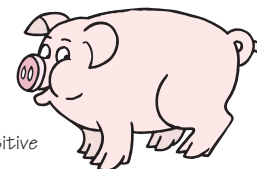
Onset Sudden/gradual 	Site 	Character ● Heavy/crushing ● Sharp ● Ache ● Colic	Radiation 
Associated symptoms ● Sweating ● Nausea/vomiting ● SOB ● Fever	Time course 	Exacerbating relieving factors ● Position ● Exercise ● Drugs	Severity ● Pain score 1–10

Figure 1.3 Examination tool box

Pulse BP O ₂ sats Temp Resp rate	Pulses JVP Heart sounds Chest ausc Abdomen Legs	Sweating ? Pale Hydration Hands Eyes/tongue	Chest Movement Tenderness Guarding Masses Bowel sounds/pulses
Vital signs	Chest pain	General exam	Abdominal pain
Headache	Limb injury	ENT exam	Eye exam

Figure 1.4 SPIN and SNOUT

SNout – test with a high sensitivity rules **out**, (e.g. highly sensitive troponin)



SPin – test with a high specificity rules **in**, (e.g. fracture tibia on X-ray)



Objectives

This book is aimed the assessment and treatment of 'minor' conditions. However, patients may present with apparently minor symptoms that are the start of a more serious problem. A systematic approach gives you the best chance of reaching an accurate diagnosis. There is often pressure to work fast; thus, it is even more important to adopt a slick and efficient structure to assessment.

A pilot does not take off before a check of vital systems has been made; the effects of error could be lethal. Equally, you need to have a checklist in your mind before discharging a patient; error could be lethal (see Figure 1.1).

System of assessment

History

- **Presenting complaint(s).** It is self-evident that you need to address the patient's main symptom(s). These should be listed.
- **Symptoms.** Individual symptoms and how to elicit a full history of that symptom are expanded in each chapter. Pain is a very common symptom; thus, a systematic method of obtaining a pain history is summarised in Figure 1.2 (SOCRATES).
- **Past history, drugs, allergy.** The patient may have had similar symptoms before and indeed had treatment (previous diagnoses may not be relevant/correct). Major illness (e.g. diabetes, lung/heart disease) may have a bearing on diagnosis and management. Key medications (e.g. warfarin, cardiac and diabetic drugs) need to be recorded.

Examination

- **Vital signs.** Disturbance of vital signs is one of the most important **red flags**. All early-warning scores to highlight serious illness are based on vital signs. **Vital signs are vital.** Early-warning scores are now commonly used to identify patients with an increased risk of serious deterioration in their condition. These scores emphasise the importance of abnormal vital signs.
- **General exam.** Learn to recognise the ill patient. The signs are subtle, the patient is pale, dark eyes, dry tongue, looks anxious. *Patients who look ill need careful assessment.*
- **Exam routines.** Develop a number of 'exam routines' for common presentations such as chest pain, injury, headache (Figure 1.3).

Investigations

- **Do you really need a test?** Investigations should only be carried out if they are necessary. Once a patient is assessed and a clinical diagnosis reached, further investigations may not be necessary (tonsillitis, cellulitis, paronychia).
- **Sensitivity and specificity** (Figure 1.4). Some investigations have a high specificity (if the test is positive then the patient has the disease – e.g. an obvious fracture of the tibia in a patient with a leg injury). However, some tests, such as d-dimer and highly sensitive troponin, are not specific (a patient with a positive d-dimer has a less than 50% chance of having a deep vein thrombosis (DVT)). Routine ordering of

tests with poor sensitivity will require a number of patients having to have further expensive or invasive investigations (see Figure 1.3).

- **Clinical decision rules.** These are evidence-based pathways that can help you decide if a patient requires investigation. These will be discussed in detail where appropriate (e.g. Ottawa ankle rules).

Types of investigations

'Quick and easy' investigations that should be within the scope of any minor illness/injury service include electrocardiogram (ECG), urine dipstick, urine pregnancy test and strip testing for blood glucose. Access X-rays are essential in the assessment of all but the most trivial minor injuries.

Computed tomography scans, magnetic resonance imaging, bone scan and ultrasound are mostly hospital-based tests for more complex or serious problems.

Blood tests are not commonly required for minor illness or injury, but exceptions include chest pain and rule out pathways for DVT.

Microbiology, such as urine/throat/wound/sputum specimens, is required to confirm the diagnosis. However, the results will not be immediately available and treatment is often commenced empirically. Follow up of results is essential.

Interpreting results of investigations

Always use the result of a test as part of the picture. The result may be unequivocal, usually when the test is positive and the test has a high specificity (e.g. the obvious fracture on X-ray). More often the result may be less certain and other parts of evidence have to be taken into account.

Pitfalls in the interpretation of investigations include:

- inexperience or lack of skill in interpretation (e.g. missing a fracture on an X-ray);
- placing too much emphasis on an equivocal test (e.g. diagnosing a urinary tract infection in a patient with abdominal pain on the basis of a few leucocytes on strip testing);
- being unaware the implications of negative tests (a normal ECG does not rule out a myocardial infarction/acute coronary syndrome);
- ignoring the results of a positive test (e.g. saying that a raised d-dimer in a patient with chest pain is due to a chest infection);
- not following up an abnormal result (delay in acting on an abnormal X-ray report).

Differential diagnosis/working diagnosis

In the acute consultation diagnosis may be imprecise and very often no diagnosis is reached.

Adopt a method of considering possible diagnoses for the presenting complaint:

- Have potentially life- or limb-threatening conditions been ruled out? Is there enough clinical evidence to indicate that these have been ruled out or that they are very unlikely?
- What is the most likely diagnosis?
- Do you need more advice, time or investigation to confirm the diagnosis?