Signs & Symptoms
Minor illness or major disease?

Symptom

• A clinical change in a person suggestive of disease – perceived by that person.
• ‘complains of ........’
• Several symptoms may present together to suggest a disease or exclude a disease.
• Indeed they may appear unrelated e.g. Breathlessness and swollen ankles in CHF.

Examples

• Cough
• Tiredness
• Aches
• Chest pains
• Breathless
• Indigestion

Sign

• A clinical change in a person, which may be observed by a clinician and indicate a disease.
• ‘on examination ........’

Examples

• Changes in skin (colour, marking) e.g. Jaundice suggests liver disease.
• Digital clubbing (fingers clubbed in lung/ hepatic disease).
• Heart murmurs.
• Sounds on listening to lungs: wheezes (rhonchi), crackles (crepitations) => indicative of CHF: wet lungs).
• Dullness to percussion of thorax (changes in sound on tapping): may suggest pneumonia.
• Obviously some overlap – patient might notice digital clubbing.

Digital clubbing
How about?

- Increased passing of urine – symptom unless in hospital
- Halitosis (bad breath) – more of a sign
- Ketone breath – sign of diabetes
- Hypertension – sign
- Palpitations – symptom and sign
- Jaundice – symptom and sign
- Itching – symptom, can be due to a whole range of conditions
- Feeling faint – symptom

Signs and symptoms may be trivial: reflecting either trivial or serious underlying disease.

E.g. Cough

Cough in a 2 year old: viral infection

Cough in a 60 year old: lung cancer

2-year old with cough:
- Is it nocturnal? Might be asthma
- Is it productive? Might be bacterial chest infection
- Is it productive of vast quantities of sputum (colour/ with blood)? Might be bronchitis due to alveoli being dilated
- Is it a dry cough? Might be a viral infection

60-year old with cough:

- Have they ever smoked?
- Dry or productive?
- How long have they had it?

Case 1:

Cough of recent onset – viral infection!

Case 2:

Productive cough with green sputum of recent onset – acute bronchitis!

Case 3:
- Smoker
- Productive cough over many years
- Grey or sometimes green sputum and blood staining (haemoptysis => refer)
- Worse in winter (suggests chronic bronchitis with acute infections)
Case 4:
- Smoker
- Persistent dry cough
- Other signs which may include: coughing up blood, digital clubbing, pleural pain (in the chest area), weight loss, CNS changes including fits
- Should arouse suspicion of cancer

Case 5:
- Productive cough with blood
- Weight loss
- Night sweats
- Should arouse suspicion of TB (tuberculosis)

Case 6:
- Cough
- Breathless at mild exertion or lying down in bed at night
- Might point to pulmonary oedema, due to left-sided congestive heart failure (cardiac asthma)

Chest pains
- Often musculoskeletal (when no explanation!)
- Respiratory (e.g. Asthma)
- Gastric origin – indigestion, reflux, oesphagitis
  - Relationship to food? (could make better or worse!)
  - Relieved by antacids? (peptic, gastric problem)
- Angina – induced by exercise, emotion stress
  - Pains down arm? Pains radiating to jaw?
  - Relieved by rest
- Heart attack – severe chest pains, not relieved by rest (call the ambulance)
  - Nausea?
  - Breathlessness?
  - Pains down arms, jaw?

Breathlessness
- Congenital – e.g. Hole in the heart
- Infection – acute bronchitis, pneumonia
- Inflammatory – asthma, chronic bronchitis
- Neoplastic – lung cancer
- Haematological – anemia
- Psychogenic – panic attack
- Degenerative – emphysema, fibrosis
- Cardiac – myocardial infarction, LV failure
- Thromboembolic – embolism
- Functional – exercise, pregnancy, obesity
- Iatrogenic – β-blockers, NSAIDs
Indigestion
- Could be ‘acid stomach’/ dyspepsia
- Overeating
- Reflux oesphagitis
- Peptic ulcer
- Stomach cancer (over 45 years raises suspicion => refer)
- Cardiac origin?

Role of the pharmacist
- To respond with advice and where necessary counter prescribe for ‘minor’ conditions which would respond to OTC (over the counter) medicines.
- Recognise potentially serious symptoms and refer to GP (General Practitioner) or A&E (Accident & Emergency).
- In general, the following should be referred:
  – Symptoms that are potentially serious
  – Persistent symptoms
  – Patients at risk

Special groups
- Babies and children
- Elderly
- Diabetics
- Asthmatics
- Pregnant or breast feeding
- Immunocompromised