

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

Symptoms are
more general

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



**Need to
know
history**

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