

## 2.1 Examples of terms used by patients that should be clarified

Patient's term	Common underlying problems	Useful distinguishing features
Allergy	True allergy (immunoglobulin E-mediated reaction) Intolerance of food or drug, often with nausea or other gastrointestinal upset	Visible rash or swelling, rapid onset Predominantly gastrointestinal symptoms
Indigestion	Acid reflux with oesophagitis Abdominal pain due to: Peptic ulcer Gastritis Cholecystitis Pancreatitis	Retrosternal burning, acid taste Site and nature of discomfort: Epigastric, relieved by eating Epigastric, with vomiting Right upper quadrant, tender Epigastric, severe, tender
Arthritis	Joint pain Muscle pain Immobility due to prior skeletal injury	Redness or swelling of joints Muscle tenderness Deformity at site
Catarrh	Purulent sputum from bronchitis Infected sinonasal discharge Nasal blockage	Cough, yellow or green sputum Yellow or green nasal discharge Anosmia, prior nasal injury/polyps
Fits	Transient syncope from cardiac disease Epilepsy Abnormal involuntary movement	Witnessed pallor during syncope Witnessed tonic/clonic movements No loss of consciousness
Dizziness	Labyrinthitis Syncope from hypotension Cerebrovascular event	Nystagmus, feeling of room spinning, with no other neurological deficit History of palpitation or cardiac disease, postural element Sudden onset, with other neurological deficit

## 2.2 Characteristics of pain (SOCRATES)

### Site

- Somatic pain, often well localised, e.g. sprained ankle
- Visceral pain, more diffuse, e.g. angina pectoris

### Onset

- Speed of onset and any associated circumstances

### Character

- Described by adjectives, e.g. sharp/dull, burning/tingling, boring/stabbing, crushing/tugging, preferably using the patient's own description rather than offering suggestions

### Radiation

- Through local extension
- Referred by a shared neuronal pathway to a distant unaffected site, e.g. diaphragmatic pain at the shoulder tip via the phrenic nerve (C<sub>3</sub>, C<sub>4</sub>)

### Associated symptoms

- Visual aura accompanying migraine with aura
- Numbness in the leg with back pain suggesting nerve root irritation

### Timing (duration, course, pattern)

- Since onset
- Episodic or continuous:
  - If episodic, duration and frequency of attacks
  - If continuous, any changes in severity

### Exacerbating and relieving factors

- Circumstances in which pain is provoked or exacerbated, e.g. eating
- Specific activities or postures, and any avoidance measures that have been taken to prevent onset
- Effects of specific activities or postures, including effects of medication and alternative medical approaches

### Severity

- Difficult to assess, as so subjective
- Sometimes helpful to compare with other common pains, e.g. toothache
- Variation by day or night, during the week or month, e.g. relating to the menstrual cycle

## 2.3 Questions to ask about common symptoms

System	Question
Cardiovascular	Do you ever have chest pain or tightness? Do you ever wake up during the night feeling short of breath? Have you ever noticed your heart racing or thumping?
Respiratory	Are you ever short of breath? Have you had a cough? If so, do you cough anything up? What colour is your phlegm? Have you ever coughed up blood?
Gastrointestinal	Are you troubled by indigestion or heartburn? Have you noticed any change in your bowel habit recently? Have you ever seen any blood or slime in your stools?
Genitourinary	Do you ever have pain or difficulty passing urine? Do you have to get up at night to pass urine? If so, how often? Have you noticed any dribbling at the end of passing urine? Have your periods been quite regular?
Musculoskeletal	Do you have any pain, stiffness or swelling in your joints? Do you have any difficulty walking or dressing?
Endocrine	Do you tend to feel the heat or cold more than you used to? Have you been feeling thirstier or drinking more than usual?
Neurological	Have you ever had any fits, faints or blackouts? Have you noticed any numbness, weakness or clumsiness in your arms or legs?

## 2.4 Typical patterns of symptoms related to disease causation

Disease causation	Onset of symptoms	Progression of symptoms	Associated symptoms/pattern of symptoms
Infection	Usually hours, unheralded	Usually fairly rapid over hours or days	Fevers, rigors, localising symptoms, e.g. pleuritic pain and cough
Inflammation	May appear acutely	Coming and going over weeks to months	Nature may be multifocal, often with local tenderness
Metabolic	Very variable	Hours to months	Steady progression in severity with no remission
Malignant	Gradual, insidious	Steady progression over weeks to months	Weight loss, fatigue
Toxic	Abrupt	Rapid	Dramatic onset of symptoms; vomiting often a feature
Trauma	Abrupt	Little change from onset	Diagnosis usually clear from history
Vascular	Sudden	Stepwise progression with acute episodes	Rapid development of associated physical signs
Degenerative	Gradual	Months to years	Gradual worsening with periods of more acute deterioration

## 2.7 Calculating pack-years of smoking

A 'pack-year' is smoking 20 cigarettes a day (1 pack) for 1 year

$$\frac{\text{Number of cigarettes smoked per day} \times \text{Number of years smoking}}{20}$$

For example, a smoker of 15 cigarettes a day who has smoked for 40 years would have smoked:

$$\frac{15 \times 40}{20} = 30 \text{ pack-years}$$

## 2.8 Features of alcohol dependence in the history

- A strong, often overpowering, desire to take alcohol
- Inability to control starting or stopping drinking and the amount that is drunk
- Drinking alcohol in the morning
- Tolerance, where increased doses are needed to achieve the effects originally produced by lower doses
- A withdrawal state when drinking is stopped or reduced, including tremor, sweating, rapid heart rate, anxiety, insomnia and occasionally seizures, disorientation or hallucinations (delirium tremens); this is relieved by more alcohol
- Neglect of other pleasures and interests
- Continuing to drink in spite of being aware of the harmful consequences

## 2.9 Examples of occupational disorders

Occupation	Factor	Disorder	Presents
Shipyard workers, marine engineers, plumbers and heating workers, demolition workers, joiners	Asbestos dust	Pleural plaques Asbestosis Mesothelioma Lung cancer	>15 years later
Stonemasons	Silica dust	Silicosis	After years
Farmers	Fungus spores on mouldy hay	Farmer's lung (hypersensitivity pneumonitis)	After 4–18 hours
Divers	Surfacing from depth too quickly	Decompression sickness Central nervous system, skin, bone and joint symptoms	Immediately, up to 1 week
Industrial workers	Chemicals, e.g. chromium Excessive noise Vibrating tools	Dermatitis on hands Sensorineural hearing loss Vibration white finger	Variable Over months Over months
Bakery workers	Flour dust	Occupational asthma	Variable
Healthcare workers	Cuts, needlestick injuries	Human immunodeficiency virus, hepatitis B and C	Incubation period >3 months

## 2.10 Systematic enquiry: cardinal symptoms

### General health

- Wellbeing
- Appetite
- Weight change
- Energy
- Sleep
- Mood

### Cardiovascular system

- Chest pain on exertion (angina)
- Breathlessness:
  - Lying flat (orthopnoea)
  - At night (paroxysmal nocturnal dyspnoea)
  - On minimal exertion – record how much
- Palpitation
- Pain in legs on walking (claudication)
- Ankle swelling

### Respiratory system

- Shortness of breath (exercise tolerance)
- Cough
- Wheeze
- Sputum production (colour, amount)
- Blood in sputum (haemoptysis)
- Chest pain (due to inspiration or coughing)

### Gastrointestinal system

- Mouth (oral ulcers, dental problems)
- Difficulty swallowing (dysphagia – distinguish from pain on swallowing, i.e. odynophagia)
- Nausea and vomiting
- Vomiting blood (haematemesis)
- Indigestion
- Heartburn
- Abdominal pain
- Change in bowel habit
- Change in colour of stools (pale, dark, tarry black, fresh blood)

### Genitourinary system

- Pain passing urine (dysuria)
- Frequency passing urine (at night: nocturia)
- Blood in urine (haematuria)
- Libido
- Incontinence (stress and urge)
- Sexual partners – unprotected intercourse

### Men

- If appropriate:
- Prostatic symptoms, including difficulty starting (hesitancy):
    - Poor stream or flow
    - Terminal dribbling
  - Urethral discharge
  - Erectile difficulties

### Women

- Last menstrual period (consider pregnancy)
  - Timing and regularity of periods
  - Length of periods
  - Abnormal bleeding
  - Vaginal discharge
  - Contraception
- If appropriate:
- Pain during intercourse (dyspareunia)

### Nervous system

- Headaches
- Dizziness (vertigo or lightheadedness)
- Faints
- Fits
- Altered sensation
- Weakness
- Visual disturbance
- Hearing problems (deafness, tinnitus)
- Memory and concentration changes

### Musculoskeletal system

- Joint pain, stiffness or swelling
- Mobility
- Falls

### Endocrine system

- Heat or cold intolerance
- Change in sweating
- Excessive thirst (polydipsia)

### Other

- Bleeding or bruising
- Skin rash

### 3.1 Information gleaned from a handshake

Features	Diagnosis
Cold, sweaty hands	Anxiety
Cold, dry hands	Raynaud's phenomenon
Hot, sweaty hands	Hyperthyroidism
Large, fleshy, sweaty hands	Acromegaly
Dry, coarse skin	Regular water exposure Manual occupation Hypothyroidism
Delayed relaxation of grip	Myotonic dystrophy
Deformed hands/fingers	Trauma Rheumatoid arthritis Dupuytren's contracture

### 3.3 Facial expression as a guide to diagnosis

#### Features

#### Diagnosis

Poverty of expression

Parkinsonism

Startled expression

Hyperthyroidism

Apathy, with poverty of expression and poor eye contact

Depression

Apathy, with pale and puffy skin

Hypothyroidism

Agitated expression

Anxiety, hyperthyroidism, hypomania

### 3.4 The nails in systemic disease

Nail changes	Description of nail	Differential diagnosis
Beau's lines	Transverse grooves (see Fig. 3.7B)	Sequella of any severe systemic illness that affects growth of the nail matrix
Clubbing	Loss of angle between nail fold and nail plate (see Fig. 3.8)	Serious cardiac, respiratory or gastrointestinal disease (see Box 3.5)
Leuconychia	White spots, ridges or complete discoloration of nail (see Fig. 3.7C)	Trauma, infection, poisoning, chemotherapy, vitamin deficiency
Lindsay's nails	White/brown 'half-and-half' nails (see Fig. 12.7)	Chronic kidney disease
Koilonychia	Spoon-shaped depression of nail plate (see Fig. 3.7D)	Iron deficiency anaemia, lichen planus, repeated exposure to detergents
Muehrcke's lines	Narrow, white transverse lines (see Fig. 12.6)	Decreased protein synthesis or protein loss
Nail-fold telangiectasia	Dilated capillaries and erythema at nail fold (see Fig. 14.13B)	Connective tissue disorders, including systemic sclerosis, systemic lupus erythematosus, dermatomyositis
Onycholysis	Nail separates from nail bed (see Fig. 3.7A)	Psoriasis, fungal infection, trauma, thyrotoxicosis, tetracyclines (photo-onycholysis)
Onychomycosis	Thickening of nail plate with white, yellow or brown discoloration	Fungal infection
Pitting	Fine or coarse pits in nail (see Fig. 3.7A)	Psoriasis (onycholysis, thickening and ridging may also be present), eczema, alopecia areata, lichen planus
Splinter haemorrhages	Small red streaks that lie longitudinally in nail plate (see Fig. 4.5B)	Trauma, infective endocarditis
Yellow nails	Yellow discoloration and thickening (see Fig. 14.13C)	Yellow nail syndrome



## 3.5 Causes of clubbing

### **Congenital or familial (5–10%)**

### **Acquired**

- Thoracic (~70%):
  - Lung cancer
  - Chronic suppurative conditions: pulmonary tuberculosis, bronchiectasis, lung abscess, empyema, cystic fibrosis
  - Mesothelioma
  - Fibroma
  - Pulmonary fibrosis
- Cardiovascular:
  - Cyanotic congenital heart disease
  - Infective endocarditis
  - Arteriovenous shunts and aneurysms
- Gastrointestinal:
  - Cirrhosis
  - Inflammatory bowel disease
  - Coeliac disease
- Others:
  - Thyrotoxicosis (thyroid acropachy)
  - Primary hypertrophic osteoarthropathy

## 3.6 Conditions associated with facial flushing

### Physiological

- Fever
- Exercise
- Heat exposure
- Emotional

**Drugs (e.g. glyceryl trinitrate, calcium channel blockers, nicotinic acid)**

### Anaphylaxis

### Endocrine

- Menopause
- Androgen deficiency (in men)
- Carcinoid syndrome
- Medullary thyroid cancer

### Others

- Serotonin syndrome
- Food/alcohol ingestion
- Neurological (e.g. Frey's syndrome)
- Rosacea
- Mastocytoses

### 3.7 The relationship between body mass index (BMI), nutritional status and ethnic group

Nutritional status	BMI non-Asian	BMI Asian
Underweight	<18.5	<18.5
Normal	18.5–24.9	18.5–22.9
Overweight	25–29.9	23–24.9
Obese	30–39.9	25–29.9
Morbidly obese	≥40	≥30

## 3.8 Features to note in any lump or swelling (SPACESPIT)

- Size
- Position
- Attachments
- Consistency
- Edge
- Surface and shape
- Pulsation, thrills and bruits
- Inflammation:
  - Redness
  - Tenderness
  - Warmth
- Transillumination

### 3.9 Conditions with characteristic facial appearances

Diagnosis	Facial features
Hypothyroidism (see Fig. 10.5)	Sparse, coarse hair and eyebrows, periorbital puffiness, dry, waxy skin, apathetic expression, macroglossia
Graves' disease (autoimmune thyrotoxicosis) (see Fig. 10.2A)	Staring appearance due to lid retraction, proptosis, evidence of weight loss
Hypopituitarism (see Fig. 10.10A)	Pale, often unwrinkled skin with loss of hair
Acromegaly (see Fig. 10.9A)	Thickened, coarse skin with enlarged nose and frontal bones, prognathism (lower jaw protrusion), widely spaced teeth, macroglossia
Cushing's syndrome (see Fig. 10.11A)	Moon-shaped plethoric facies
Osteogenesis imperfecta (see Fig. 3.30A)	Blue sclerae
Hereditary haemorrhagic telangiectasia (see Fig. 3.30B)	Telangiectasia on and around lips
Systemic sclerosis (see Fig. 3.30C)	Tight skin constricting mouth, 'beaking' of nose, loss of nasolabial folds
Myotonic dystrophy (see Fig. 3.30D)	Frontal balding, paucity of expression, bilateral ptosis
Down's syndrome (see Fig. 3.31)	Flat facial profile, up-slanting palpebral fissures, small, low-set ears, macroglossia, Brushfield spots in iris
Systemic lupus erythematosus	'Butterfly' erythematous rash on cheeks