شابتر ال general examination كامل الا موضوع lumps & LNs واخر شغلة اللي هي spot Dx .....

مزايا التلخيص هذا :

- شامل للكتاب، واللي تم تركه هو اشبه بالتعبير لهيك ما جبته.
- شامل الصور ايضا.
- شامل الجداول.
- كل موضوع بلون، مثلا المصطلح بلون وتعريفه بلون.
- عمل نشجرات للاشياء الاساسية.
- جعل كل فكرة على شكل نقطة مستقلة.
- استخدام الالوان للامراض او الاعراض (حسب الموضوع مثلا جلد او لسان او رائحة بيكون اللون اما للمرض او العرض)
- عند اخر حاجة مليت فبس حددت عالكتاب المعلومات وحطيتهم محددات كنقاط 😅

📌 باختصار هو عملية اعادة ترتيب للموجود في الكتاب لستهيل دراسته.

إعداد: عبادة العايد

1) introduce your self.

- Privacy.
- seeks permission.
- offer chaperon.
- adjustable backrest.
- expose the areas to be examined
  ↳ cover the rest of the patient with a blanket or sheet to ensure that they do not become cold.

the purpose of the physical examination is to look for the presence or absence of physical signs that confirm or refute the differential diagnosis you have obtained from the history

- Clothing gives clues about personality, so notice the patient's attire.
- See Gait & Posture of patient, it may give you indications for pain, weakness or abnormalities or others.
- facial expression and speech provide clues to ~~their~~ patient ~~of~~ physical and psychological wellbeing.

Termenology of Skin & Hands

1) Finger Clubbing: describes painless soft tissue swelling of the terminal Phalanges and increased convexity of the nail.

2) Albinism:- inherited disorder in which Patients have little or no melanin in their skin or hair.

3) Hemo Chromatosis: inherited condition of excessive iron absorption results in skin hyperpigmentation due to iron deposition and increased melanin Production.

4) Jaundice: abnormal yellow discolouration of the skin, sclera and mucous membranes.

5) koilonychia: spoon-shaped Nails.

6) Cyanosis: blue discoloration of the skin and mucous membranes that occurs when the absolute concentration of deoxygenated haemoglobin is increased.

General examination

- Hands
  - deformity
    - -nerve palsy
    - -arthritis
    - * trauma is the most common cause of hand deformity.
  - Colour
    - - cyanosed
    - ~~tobacco~~
    - - tobacco staining
    - - Pigmentation
    - ex:-
    - * in COPD:- hands may be cyanosed due to reduced O_2 supply but warm due to vasodilation from ↑↑ CO_2.
    - * in heart failure:- hands are often cyanosed & cold due to vaso constriction in response to a low cardiac output.
  - Temperature
    - good guide to peripheral perfusion
- Skin
  - Can indicate systemic diseases.
  - ex:-
  - * in coarse skin & broad hands:- Patient has acromegally.
  - * in tight contracted skin (scleroderma):- associated with systemic sclerosis (usually has calcium deposits)
- Tongue
- odours
- Body habitus and nutrition
- Lumps and lymph nodes
- Spot diagnosis
- Nails
  - next page.
- Skin

General examination

- Hands
  - deformity
  - Colour
  - temprecture
  - skin
- Skin
  - Nails
    - occurs in wide variety of systemic diseases
      - RS: Lung cancer
      - CVS: cyanotic congenital heart disease
      - GI: Cirrhosis
      - others: Thyrotoxicosis
- Toungue
- Odours
- body habitus and nutrition
- lumps and lymph nodes
- Spot diagnosis

(X) Finger clubbing:

1- usually affects the fingers symmetrically.
2- may involves the toes and can be unilateral if caused by a proximal vascular condition such as arteriovenous shunts for dialysis.
3- in over 90% of patients it accompanies a serious underlying disorder.
4- Clubbing may recede if the underlying condition resolves.

Examination sequence

- Look across the nail bed from the side of each finger. Observe the distal phalanges, nail and nail bed:
  - Estimate the interphalangeal depth at the level of the distal interphalangeal joint (this is the anteroposterior thickness of the digit rather than the width). Repeat at the level of the nail bed.
  - Assess the nail bed (hyponychial) angle (Fig. 3.9A).
- Ask the patient to place the nails of corresponding (ring) fingers back-to-back and look for the normal 'diamond-shaped' gap between the nail beds (Schamroth's window sign; Fig. 3.9B).
- Place your thumbs under the pulp of the distal phalanx and use your index fingers alternately to see if there is fluctuant movement of the nail on the nail bed (Fig. 3.9C).

Finger clubbing is likely if:

- the interphalangeal depth ratio is >1 (that is, the digit is thicker at the level of the nail bed than the level of the distal interphalangeal joint; Fig. 3.9A),
- the nail fold angle is >190 degrees (Fig. 3.9A), or
- Schamroth's window sign is absent (Fig. 3.9B).

Increased nail-bed fluctuation may be present and may support the finding of clubbing, but its presence is subjective and less discriminatory than the above features.

3.4 Causes of clubbing

Congenital or familial (5%–10%)

Acquired

- Thoracic (~70%):
  - Lung cancer
  - Pulmonary fibrosis, including asbestosis
  - Chronic suppurative conditions: pulmonary tuberculosis, bronchiectasis, cystic fibrosis, lung abscess, empyema
  - Mesothelioma
- 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

3.3 The nails in systemic disease

Nail changes	Description of nail	Differential diagnosis
Beau's lines	Transverse grooves (Fig. 3.7B)	Sequela of any severe systemic illness that affects growth of the nail matrix
Clubbing	Loss of angle between nail fold and nail plate (Fig. 3.8)	Serious cardiac, respiratory or gastrointestinal disease (Box 3.4)
Leuconychia	White spots, ridges or complete discoloration of nail (Fig. 3.7C)	Trauma, infection, poisoning, chemotherapy, vitamin deficiency
Lindsay's nails	White/brown 'half-and-half' nails (see Fig. 12.7, p. 278)	Chronic kidney disease
Koilonychia	Spoon-shaped depression of nail plate (Fig. 3.7D)	Iron deficiency anaemia, lichen planus, repeated exposure to detergents
Muehrcke's lines	Narrow, white transverse lines (see Fig. 12.6, p. 278)	Decreased protein synthesis or protein loss
Nail-fold telangiectasia	Dilated capillaries and erythema at nail fold (see 14.17B, p. 335)	Connective tissue disorders, including systemic sclerosis, systemic lupus erythematosus, dermatomyositis
Onycholysis	Nail separates from nail bed (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 (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 (Fig. 4.5B, p. 51)	Trauma, infective endocarditis
Yellow nails	Yellow discoloration and thickening (Fig. 14.18, p. 336)	Yellow nail syndrome

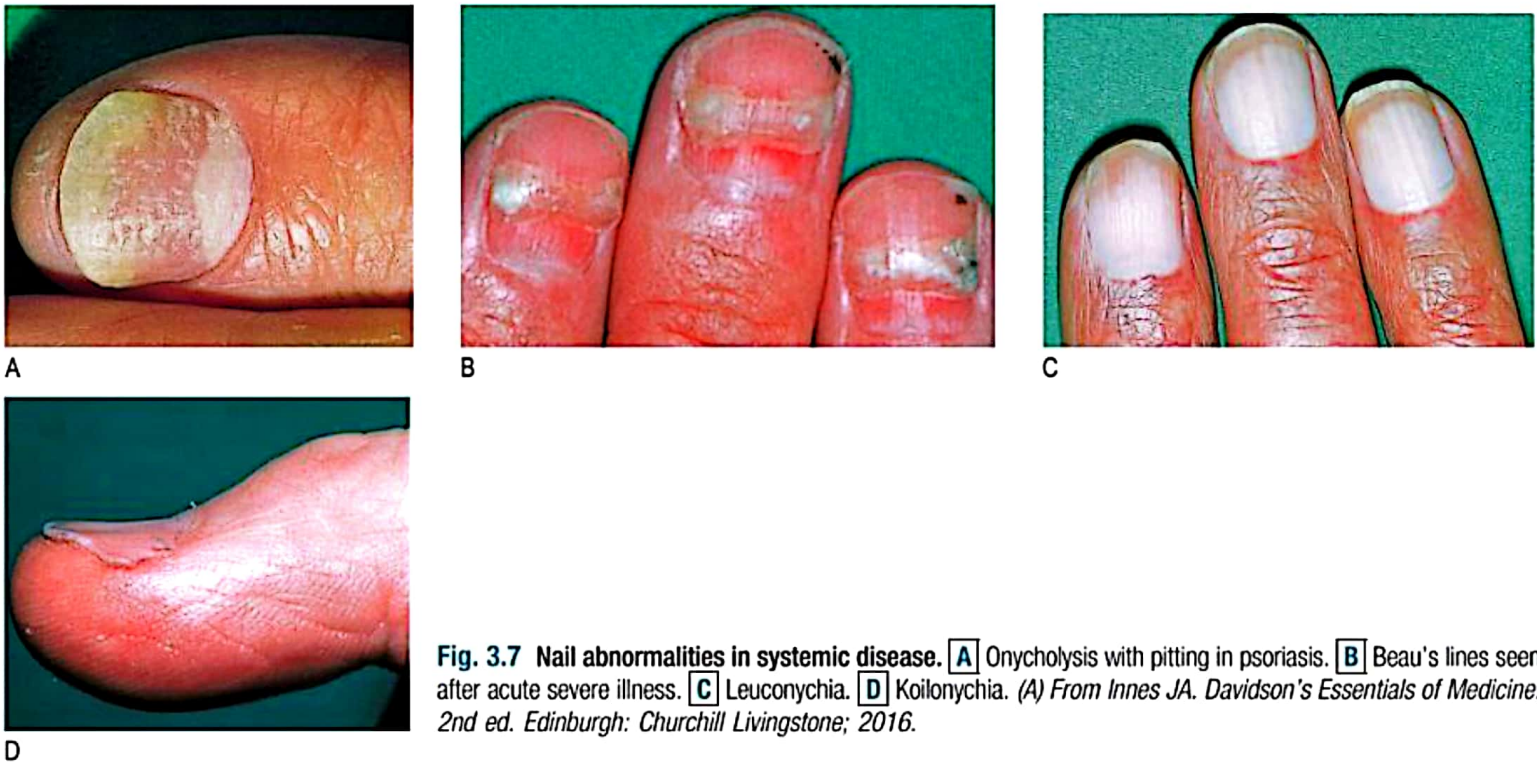


Fig. 3.7 Nail abnormalities in systemic disease. [A] Onycholysis with pitting in psoriasis. [B] Beau's lines seen after acute severe illness. [C] Leuconychia. [D] Koilonychia. *(A) From Innes JA. Davidson's Essentials of Medicine 2nd ed. Edinburgh: Churchill Livingstone; 2016.*

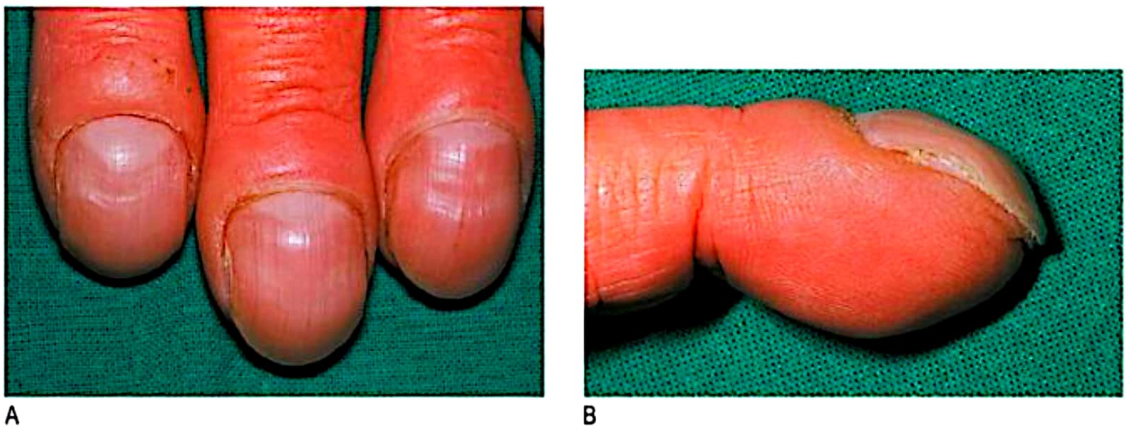


Fig. 3.8 Clubbing. [A] Anterior view. [B] Lateral view.

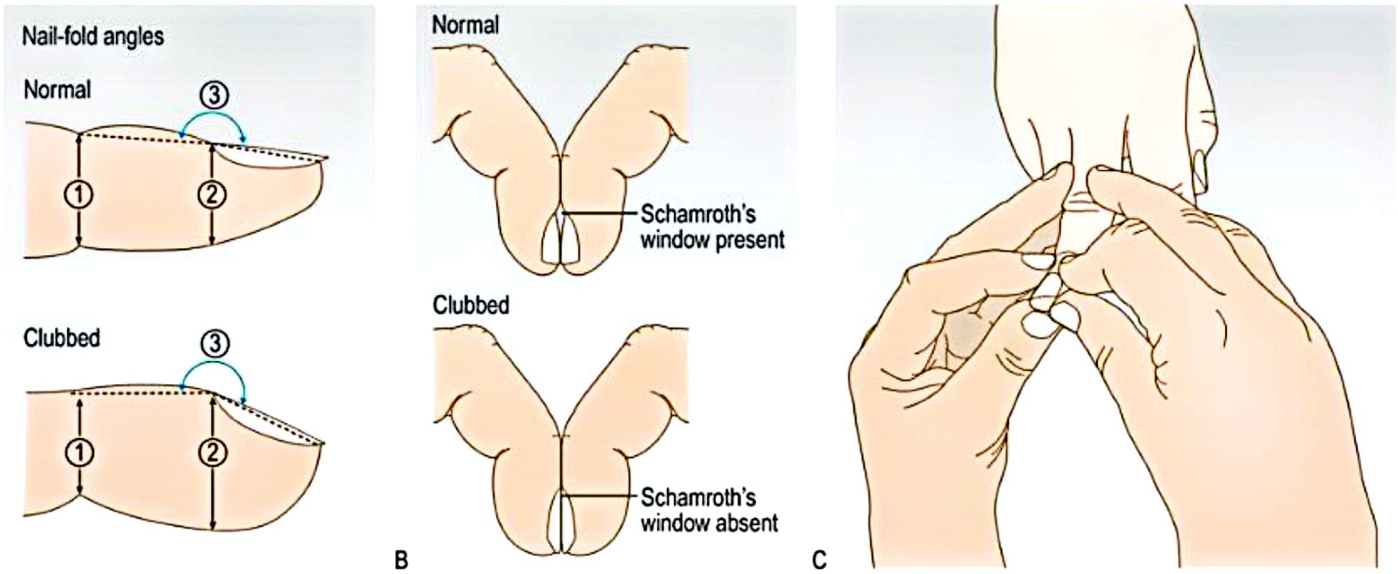


Fig. 3.9 Examining for finger clubbing. [A] Assessing interphalangeal depth at (**1**) interphalangeal joint and (**2**) nail bed, and nail-bed angle (**3**). [B] Schamroth's window sign. [C] Assessing nail- bed fluctuation.

Skin Pigmentation abnormalities

1) Vitiligo: - it is autoimmune condition.
- Causes irregular pale patches of skin depigmentation
- it appears commonly on the face, neck, hand and extensor aspects of the limbs
- it is associated with other autoimmune diseases, such as diabetes mellitus, thyro and adrenal disorders and pernicious anemia

2) HypoPituitarism: results in Pale skin due to reduced production of melanotrophic Peptides

3) Albinism: inherited disorder in which patients have little or no melanin in their skin or hair.

4) high Amount of ACTH as in adrenal insufficiency: lead to hyper Pigmentation and and production of brown Pigmentation.

5) Pregnancy: cause blotchy hyperPigmentation on the face, known as Chloasma.

6) Hemochromatosis: inherited condition of excessive iron absorption results in skin hyperpigmentation due to iron deposition and increased melanin production.

General Examination

Hands | Skin | Toungue | odours | body habitus and nutrition | Lumps and LNs | Spot diagnosis

Colour determined by Rigments

melanin

ex:-

① Vitiligo:- autoimmune disease causes irregular Pale Patches of skin depigmentation

⇓

commonly in the face, neck, hands & extensor aspects of the limbs, associated with DM

② hypo Pitutirism

③ Albinism

endogenous brown Pigment

ex:-

adrenal insufficiency

⇓

increase ACTH

Produces brown Pigmentation

④ Haemochromatosis:-

⇓

Cause skin hyper Pigmentation due to iron deposition and increased melanin production.

Carotene

⇓

① hypothyroidism

② anorexia nervosa

⇓

both are situations related to impaired metabolism

⇓

both leads to yellowish discolouration in face, Palms and soles, but not the sclera or conjunctiva

exogenous yellow Pigment

amount of oxyhemoglobin (red)

⇓

① Hemosiderin:- erythematous skin

② CoagulopathY:- Easy bruising

deoxyhemo-globin (dusky blue)

7) Hemosiderin : Product of Hb breakdown which deposited in the skin of the lower legs following subcutaneous extravasa of blood due to venous insufficiency which lead to erythematous skin

8) Coagulopathy + glucocorticoid use : Easy bruising skin

9) Hypothyroidism + anorexia nervosa: lead to impaired metabolism, so hypercarotenaemia, which appear as yellowish discolouration seen on the face, Palms Soles, but not sclera or Conjunctiva

~~10) Jaundice~~

9) *Parenchymal liver disease
*biliary obstruction
*hemolysis
• lead to jaundice, which are yellowish discolouration on skin, sclera & mucous membra

10) anemia + vasoconstriction: both lead to Pallor skin, due to reduction in number of circulating oxyhemoglobin.

~~end vaso~~

⊛ best sites to assess for the Pallor of anemia are the conjunctiva (ant. rim), Palmar skin & the face.

⊛ absence of Pallor doesn't exclude anemia.

11) Vaso dilation : lead to flushed or Pink skin

12) Polycythema : lead to raised Hb concentration and elevated hematocrit, so lead to facial or skin plethora

13) Cyanosis : blue discoloration of skin and mucous membranes occurs when absolute concentration of deoxygenated Hb increased.

* Cyanosis can be due to excessive circulating met Hb or sulphaemoglobin.

* Central cyanosis: seen in lefs, taungue, and buccal or sublingual mucosa.
  - Can related to any disease leaf to hypoxia (usually cardiac or RS) when it lead to ↑↑ deoxygenated Hb.

* PeriPheral cyanosis:
  - seen in the distal extremities.
  - may be caused by cold exposure.
  - Pathological causes related to low cardiac output states, arterial disease & venous states or obstruction

General Examination

- Hands
- Skin
  - central cyanosis
  - smooth tongue
    - iron deficiency
  - enlargment
    - acromegaly
  - wasting or fasciculation
    - motor neurone disease
- Tongue
  - red beefy tongue
    - pernicious anemia
- odours
  - ① Provide clues to the Patient social or behavioural habits
    - alcohol, tobacco, Halitosis
  - ② others:
    - diabetic ketoacidosis: ketones (sweet smell)
    - liver failure: Fetor hepaticus (mousy smell)
    - uraemia: uraemic fetor (fishy or ammonical smell)
    - gastric outlet obstruction: foul-smelling bleaching
    - gastrocolic fistula: [redacted] faecal smell
- lumps and lymph nodes
- Spot diagnos

General Examination

Hands | Skin | Tongue | Odours | Body habits and nutrition | Lumps and LNs | Spot diagnosis

Weight

Obesity
- usually results from excessive calorie intake relative to calories expended
- Not the distribution of fat

* next Page

Weight loss
next Pages

Stature

Short Stature
* in Pathological causes it related to Compression fractures of the spine due to **osteoporosis**.
* in Post menopausal women, loss of > 5cm heigh is an indication to investigate for **osteoporosis**.

Tall Stature
1) marfan's syndrom
2) PrePubertal hypogonadism
3) gigantism

(next Pages)

Hydration

- dehydration
- generalized oedema
- Localized edema

next Pages

3.5 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

⑧ central obesity: Judged by the waist circumference: [the maximum abdominal girth at the midpoint between the lower costal margin and the iliac crest]

بالمتطلبات وهو السمنة في منطقة البطن والخصر.

- central obesity related to:

  - hypertension
  - type II DM
  - coronary artery disease

  → so it has worse health outcomes.

- waist-to-hip ratio can be useful assessment of adipose distribution.

* gluteal-femoral obesity = pear shape has a better prognosis.

* greater waist:hip ratio = apple shaped have an increased risk of coronary artery disease & the metabolic syndrome.

⊛ Marfan's syndrome:

- The limbs are long in relation to the length of the trunk, and the arm span exceeds height, also Patient has long fingers, narrow feet, high-arched Palate, and some CVS abnormalities.

- CVS abnormalities related to marfan as:
  - mitral valve Prolapse
  - dilatation of the aortic root with aortic regurgitation

⊛ PrePuberty hypogonadism:

~~- During Puberty, the epiP~~

⊛ gigantism: very rare cause of tall stature due to excessive growth hormone secretion (from Pituitary adenoma.) befor epiphyseal fusion has occured.

Localised oedema

Localised oedema (an excess of interstitial fluid) is most commonly caused by venous disease but may also develop in lymphatic, inflammatory or allergic disorders.

Venous causes

Increased venous pressure raises hydrostatic pressure within capillaries, producing oedema in the area drained by that vein. Venous causes include deep vein thrombosis, external pressure from a tumour or pregnancy, or venous valvular incompetence from previous thrombosis or surgery (Fig. 3.22). Conditions that impair the normal muscle pumping action, such as hemiparesis and forced immobility, increase venous pressure by impairing venous return. As a result, oedema may occur in immobile, bedridden patients, in a paralysed limb, or in a healthy person sitting for long periods, such as during travel.

Lymphatic causes

Normally, interstitial fluid returns to the central circulation via the lymphatic system. Any obstruction to lymphatic flow may produce localised oedema (lymphoedema; Fig. 3.23). If the condition persists, fibrous tissue proliferates in the interstitial space, and the affected area becomes hard and no longer pits on pressure. In the UK, the most common cause of chronic leg lymphoedema is congenital hypoplasia of leg lymphatics (Milroy's disease); in the arm, lymphoedema usually follows radical mastectomy and/or irradiation for breast cancer. Lymphoedema is common in some tropical countries because of lymphatic obstruction by filarial worms (elephantiasis).

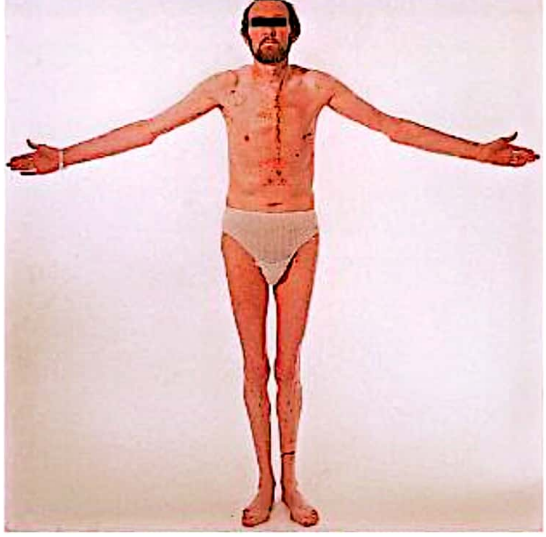
Inflammatory causes

Any cause of tissue inflammation, including infection or injury, liberates mediators, such as histamine, bradykinin and cytokines, which cause vasodilatation and increase capillary permeability. Inflammatory oedema is accompanied by the other features of inflammation (redness, tenderness and warmth) and is, therefore, painful.

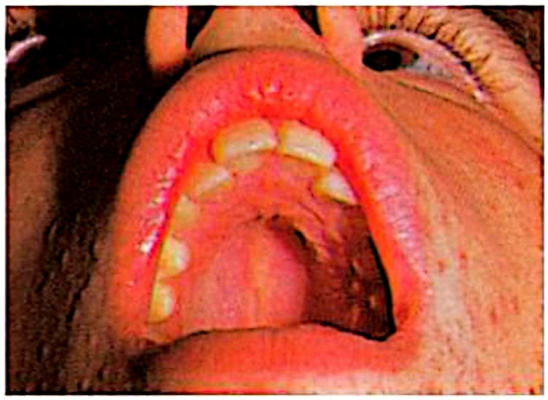
Allergic causes

Increased capillary permeability occurs in acute allergic conditions, for example, an insect bite in an allergic individual. The affected area is usually red and pruritic (itchy) because of local release of histamine and other inflammatory mediators but, in contrast to inflammation, is not painful.

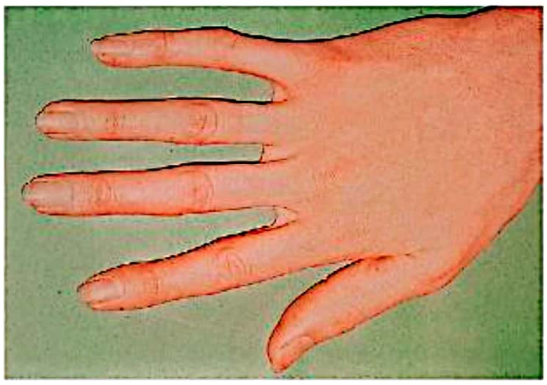
Angio-oedema is a severe form of allergic oedema affecting the face, lips and mouth, most commonly caused by insect bites, food allergy or drug reactions (Fig. 3.24). Swelling may develop rapidly and become life-threatening if the upper airway is involved.



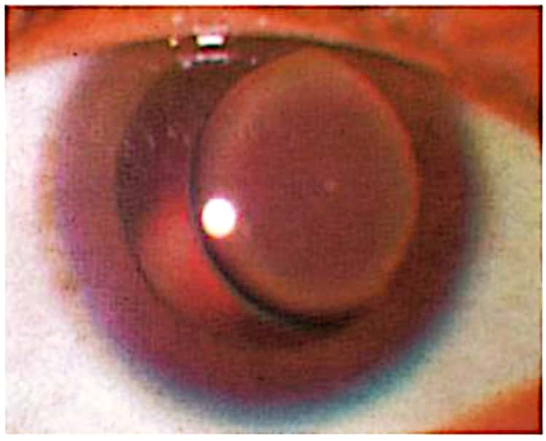
A



C



B



D

Fig. 3.21 Marfan's syndrome, an autosomal dominant condition. A Tall stature, with the torso shorter than the legs (note surgery for aortic dissection). B Long fingers. C High-arched palate. D Dislocation of the lens in the eye. *(A–D) From Forbes CD, Jackson WF. Color Atlas of Clinical Medicine. 3rd ed. Edinburgh: Mosby; 2003.*

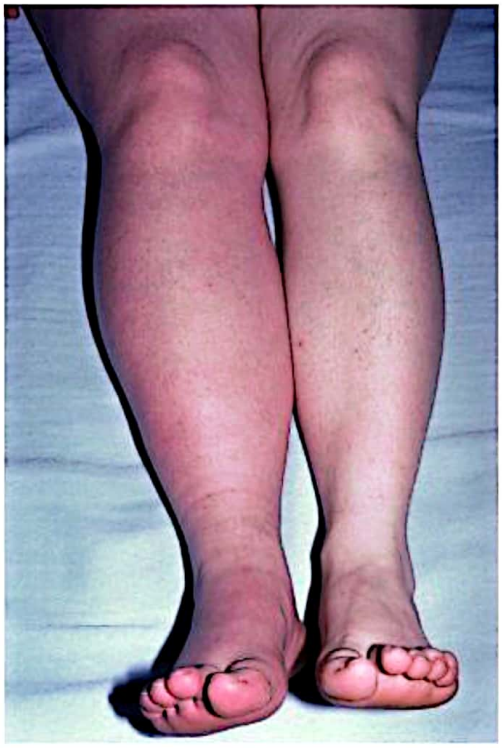


Fig. 3.22 Swollen right leg, suggesting deep vein thrombosis or inflammation. Causes include soft tissue infection or a ruptured Baker's cyst.

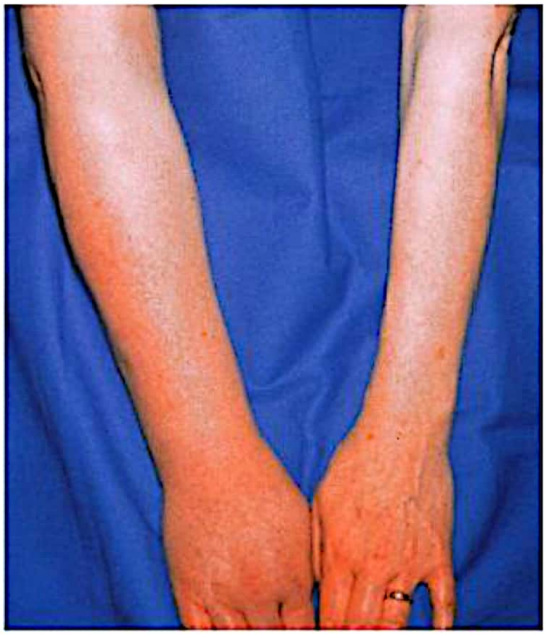


Fig. 3.23 Lymphoedema of the right arm following right-sided mastectomy and radiotherapy.

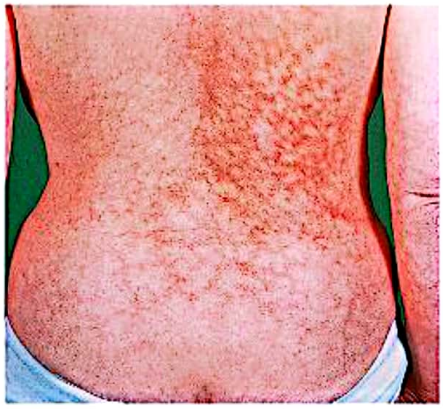


Fig. 3.12 Erythema ab igne.

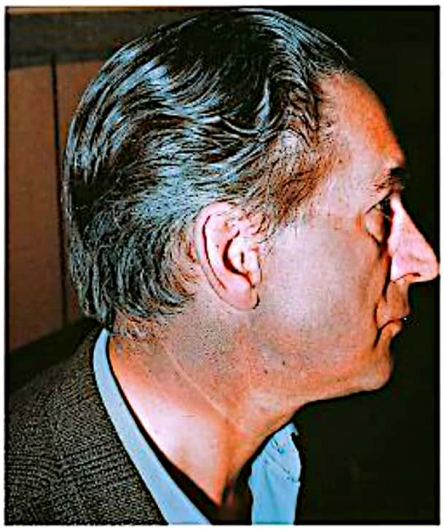


Fig. 3.14 Phenothiazine-induced pigmentation.

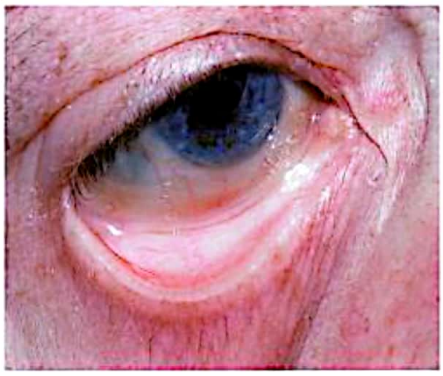


Fig. 3.15 Conjunctival pallor.

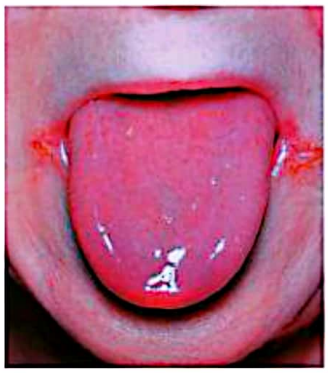
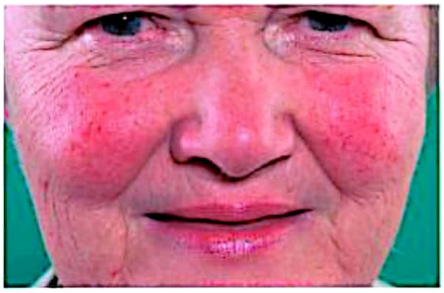
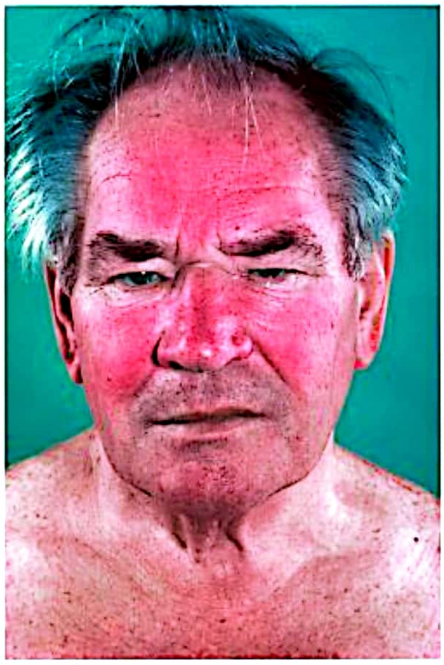


Fig. 3.16 Smooth red tongue (glossitis) and angular stomatitis of iron deficiency.



A



B

Fig. 3.17 Flushing due to carcinoid syndrome. A Acute carcinoid flush.