

Chapter two

INTEGUMENTARY

Developmental Variations

Infants: skin is smooth & little subcutaneous tissue. Δ in color can readily be seen. psychological jaundice may occur 2-3 days after birth. Immature sweat glands \rightarrow poor thermoregulation.

apocrine glands begin to : **Adolescents** enlarge and function. Axillary sweating \uparrow sebum production \uparrow

Pregnant: \uparrow blood flow to skin. Skin thickens and separates & stretching. Hormonal Δ s result in hyperpigmentation.

Hormonal \downarrow resulting to : **Menopausal women** hot flashes. Facial hair \uparrow . Incidence of skin tags \uparrow

Older Adults: skin atrophies. sebum and sweat \downarrow . Skin becomes dryer and flattens. Elasticity \downarrow .

Cultural Variations

When assessing color Δ , : **Dark skin** check oral mucous membranes. African Americans have \uparrow incidence of keloids, mongolian spots.

Asian: assess the sclera, rather than the skin for jaundice. Produce less sweat \rightarrow less body odor.

Ppl of Irish, German, or : **Fair skinned** Polish descent have \uparrow risk of skin cancer & prolonged sun exposure.

Focused History: Δ in mole or lesion.

Pruritus or itch. Nonhealing wound. Rashes, Δ in hair or nails.

Suspicious Lesions

- A = asymmetry
- B = irregular borders/bleeding
- C = color Δ / multicolored
- D = diameter greater than 0.5cm
- E = enlarge in size

Palpation

Temperature
Moisture

Turgor
Texture

Physical Assessment

Approach: head-to-toe, anterior, posterior, and lateral

inspection and palpation : **Technique**

Equipment: gloves, ruler, penlight, magnifier
wear gloves if necess. : **Maintain Standard Precaution** any.

General Survey & vital signs and head-to-toe scan

Inspection of skin: color, integrity, odor

Pallor: paleness or loss of color from the skin or mucous membranes.

Jaundice: yellowing of the skin on whites of the eyes. excess pigment bilirubin

liver disorder



Red/Erythema: superficial redness of the skin, patches, as result of injury or irritation.



Cyanosis: blue skin due to cold exposure, tight clothes, or jewelry



Skin Lesions

Primary: initial Δ in skin. Flat, nonpalpable Δ in primary lesion. skin can be : **Secondary** thickened and scaling & \uparrow skin marking, dried exudates.

Vascular: birthmarks or skin abnormalities

\hookrightarrow **ecchymosis:** discoloration of skin due to bleeding underneath, bruising.

\hookrightarrow **Petichiae/Purpura:** small red/purple spot caused by bleeding (Hemorrhage). Forms when blood vessel ruptured.

\hookrightarrow **Venous Stars:** \star -like lesion occur on dorsum of feet, legs, back, and lower chest.

\hookrightarrow **Telangiectasia:** small dilated blood vessels near the surface of skin or mucous membrane.

\hookrightarrow **Spider Angiomas:** type of telangiectasia



\hookrightarrow **Capillary hemangiomas:** dull red, firm dome-shaped hemangioma

Nails

Condition
Color local or systemic
Capillary Refill

Angle of Attachment $\rightarrow 160^\circ$
Texture

Hair

Color	Distribution	Lesion
Quantity	Texture	Pediculosis
Condition of scalp		

Hirsutism: abnormal growth of hair on a person's face and body, esp. women.

CN

- 1 → Olfactory nerve: smell
- 2 → Optic nerve: vision
- 3 → Oculomotor nerve: eye movement and pupil reflex
- 4 → Cranial nerve: aka trochlear nerve
eye movement
- 6 → Abducens nerve: eye movement
- 11 → Accessory nerve: neck movement
separates into spinal and cranial nerve
- 8 → Vestibulocochlear nerve: hearing and balance

Chapter Three

HEAD, FACE, NECK

Focused History: head pain, jaw tightness or pain, neck pain or stiffness, neck mass. Nasal congestion, nose bleeds. Mouth or dental pain, lesions. Sore throat or hoarseness.

Developmental Considerations

Infants & Children: Fontanelles (soft spots) allow for growth. 20 teeth. Lymphatic tissue (nodes and tonsils) are larger in children

Thyroid may be palpable. Gums may **:Pregnancy hypertrophy (enlarge)**

Older Adults: Gum disease and tooth loss. Salivation ↓. Sense of taste and smell diminished. More noticeable facial bones

Physical Assessment

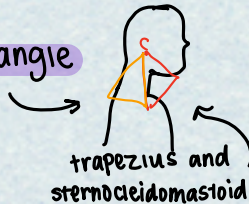
Landmarks:

↳ **Nasolabial folds:** 2 skin folds in the face.



↳ **Palpebral fissures:** opening of the eyelids

↳ **Anterior/Posterior triangle**



Techniques

palpation
inspection

auscultation
percussion

sitting **: Position**

Tools: penlight, tongue blade, gauze, cup of water, stethoscope

Inspection

Head: Note size, shape, symmetry, position.

Normal = normocephalic, erect, midline

assess facial expression, symmetry, **:Face** abnormal movements, lesions, hair.

Normal = facial expression appropriate; Nasolabial folds and palpebral fissures symmetric; hair distribution appropriate for pt's age, gender, and ethnicity. No lesions

Nose: position, deformity, septal deviation, discharge, flaring

Normal = nose midline, symmetrical, no deviation, no flaring; Nasal mucosa pink, moist; no lesion, edema

Frontal maxillary sinuses: edema, discoloration, transilluminate

Parotid and submandibular glands: edema, redness.

Inspection of Oral Structures

Lips: Note color, condition, lesion

Teeth: color, number, condition, caries, occlusion

Tongue: color, texture, lesions, mobility

Hard/Soft Palate: color, condition, lesions, intactness

Tonsils: color, exudates, enlargement

Uvula: symmetrical rise

Palpation of Head, Nose, Face, Oral Structures

Head: masses, tenderness, scalp mobility

Face: symmetry, tenderness, muscle tone, TMJ function

Salivary glands: enlargement and tenderness

Nose: deformity, tenderness

Frontal & maxillary sinuses: tenderness

Lips & Tongue: tenderness, muscle tones, lesions

Oropharynx: gag reflex

Inspection of Neck: positions → neutral, swallowing, hyperextended. Note for masses, symmetry, ROM, condition of the skin

Palpation of Neck

Thyroid glands: anterior or posterior approach; locate isthmus below cricoid cartilage; note size, shape consistency, tenderness, and nodules

↳ have pt swallow and hyper-extend neck

Note size, shape, symmetry, **:Cervical lymph nodes** consistency, mobility, location, tenderness, temperature

↳ lymph nodes aren't usually visible or tender

↳ using gentle pressure ē pads of the fingers, palpate ē both hands to compare both sides.

Nasolabial folds: best for assessing symmetry of facial expression

Chapter four

EYE

Externals

eyelids, extraocular muscles, eyelashes, iris, cornea, lacrimal glands, lacrimal ducts, pupil, conjunctiva, anterior chamber, sclera

Internals

Optic disc: identifies the start of the optic nerve where messages from cone and rod cells leave the eye via nerve fibers to the optic centre of the brain.

white cup-like area in the center: **Physiological cup** of the optic disc

Retinal arteries: blood vessels in the eye. Provide essential nutrients

returns blood to the heart. The **Retinal arteries** artery is a branch of the ophthalmic artery, & works to form the arterioles (smaller branches of an artery) of the retina.

Retina: receive light that lens has focused, convert the light into neural signals, send these signals onto the brain for visual recognition

part of the retina at the back of the **Macula** eye. Responsible for our central vision, most of our color vision and fine detail

Developmental Variations

Infants: permanent eye color is usually established @ 9 months. sclera is thin. Visual acuity is 20/200. eye movement is disconjugate

Use Snellen chart. Screen for **Adolescents** Color blindness between 4-8 years old.

Older Adult: presbyopia (aging of the eye), cataracts (clouding of the lens), Arcus senilis (white, light grey, or bluish ring), ↓ in tear production, macular degeneration (gradual deterioration of light-sensing cells in tissues @ back of eye), glaucoma (unstable/↑ intraocular pressure), both peripheral and central visual acuity diminished)

Focus History: vision loss, double vision, eye tearing, eye drainage, eye pain, blurred vision.

Diplopia: double vision

Physical Assessment

Anatomical landmarks: visual fields

Approach: inspection, palpation, ophthalmoscopy

Position: sitting

Visual Acuity

↳ Far vision: snellen eye chart

↳ Near vision: reads 13-15 in. from eyes

↳ Color vision: identify color bars

Inspection:

Lids and lashes: color, lesion, edema, symmetry

Lacrimal glands and ducts: color, edema, drainage

Conjunctiva: color, moisture, foreign bodies

Sclera: color, tear, moisture

External Structure

Cornea: clarity and abrasion, corneal reflex

Anterior chamber: clarity, bulging iris

Iris: color, size, shape

Palpation

Eye ball: consistency, tenderness

Lacrimal glands and ducts: tenderness, excess tearing

Ophthalmoscopy

Red reflex: presence, opacities

Retinal vessels: size ratio of arteries and veins
arteriole light reflex

Chapter four

EAR

External ear: auricle, external ear canal

Middle ear: tympanic membrane, auditory ossicles, eustachian tube

Inner ear: labyrinth, cochlea, organ of Corti, CN VIII

Developmental Variations

Infants: abnormalities in structure & positioning, low set ears @ $> 15^\circ$ angle

Adolescents: noise induced hearing loss

Older Adults: presbycusis (hearing loss from high pitched sound)

Focus History

Vertigo: loss of balance, surrounding feels like its spinning

Hearing loss

Earache (otalgia)

Ringling in the ears (tinnitus)

Ear drainage (otorrhea)

Technique: inspection, palpation

angle of attachment,
size, shape, symmetry,
drainage (clear, blood, purulent)

palpate tragus, mastoid, helix for tenderness.

Otoscopic Exam

external ear canal: patency, color, drainage, lesions, foreign object

tympanic membrane: color, intactness, landmarks

Hearing test

Gross hearing: whisper test, weber test - conductive hearing loss (excessive cerumen)