Health assessment
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Head and neck assessment

A head and neck assessment focuses on the cranium, face, thyroid glands, and lymph nodes structures contained within the head and neck. When assessing the head, face and throat, focus on assessment of suspected deficits as indicated by the history, patient complaints, or disease process the patient is exhibiting. Some of the following points fall outside of the general scope of nursing practice but may be observed by the nurse, or practiced in advanced nursing roles.

Structures of head and neck
Head, skull and sutures, facial bones, TMJ Face sinuses, nose Mouth lips, uvca mucosa, teeth, gingivae, tongue, pharynx, palates, tonsils, saliva, Neck, thyroid, cervical lymph nodes

Cranium: it consists of eight bones:
- Frontal
- 2 Parietal
- 2 Temporal
- Occipital
- Ethmoid
- Sphenoid

Face: the face consists of 14 bones:
- 2 Maxilla
- 2 Zygomatic “cheek”
- 2 Inferior conchae
- 2 Nasal
- 2 Lacrimal
- 2 Palantine
- 1 Vomer
- 1 Mandible” jaw”

ASK the following:

☐ Head and Neck
☐ Do you get frequent or severe headaches?
☐ Any past history of head injury?
☐ Do you frequently get dizzy?
☐ Do you have any neck pain, swelling, or lumps?
☐ Do you have a history of head or neck surgery?

☐ Ears
☐ Have you had many ear infections?
☐ Do you have any discharge from your ears?
☐ Do you have any hearing difficulty?
☐ Do you have any environmental or occupational exposure to loud noises?
☐ Any ringing in your ears? (tinnitus)
☐ Any dizziness? (vertigo)

☐ Eyes
☐ Any vision changes or difficulty?
☐ Any eye pain?
☐ Do you have double vision?
☐ Any redness, swelling or discharge?
☐ Do you have a history of glaucoma?
☐ Do you wear glasses or contacts?

☐ Nose
☐ Any nasal discharge?
☐ Do you get frequent colds?
☐ Do you have sinus pain?
☐ Do you get nose bleeds?
☐ Do you have allergies?
☐ Have you had a change in sense of smell?

☐ Mouth and Throat
☐ Do you have any sores or lesions in your mouth or throat?
☐ Do you have a sore throat and hoarseness?
☐ Do you have a toothache or get bleeding gums?
☐ Any difficulty swallowing?
☐ Do things taste differently than usual?
    ☐ Do you smoke or drink?
When assessing the head, ears, eyes, nose, mouth, and throat, EXAMINE the following as indicated by the history, patient complaints or disease process the patient is exhibiting. Some of the following points fall outside of the general scope of nursing practice but may be observed by the nurse, or practiced in advanced nursing roles.

☒ Head and Neck
☒ General facial symmetry
☒ Hair distribution
☒ General facial expressions
☒ Lymph nodes or lesions

☒ Ears
☒ Size, shape, skin condition, and tenderness
☒ External canal (redness, swelling, discharge)
☒ Tympanic membrane [color & characteristics (amber, redness), air/fluid levels]
☒ Hearing acuity (also examined as you collect the patient’s history)

☒ Eyes
☒ Visual acuity
☒ Visual Fields (confrontation test)
☒ Extraocular muscle function (nystagmus, abnormal corneal light reflex)
☒ Conjunctiva and sclera (redness, irritation)
☒ Cornea, lens, and iris
☒ Pupil (shape, symmetry, light reflexes, accommodation)
☒ Ocular fundus (red reflex, optic disc, retinal vessels, macula)

☒ Nose
☒ Nasal cavity (discharge, rhinorrhea, swollen, boggy, mucosa)
☒ Sinuses (tenderness)

☒ Mouth and Throat
☒ Skin integrity (lesions or blisters)
☒ Teeth (discoloration, bleeding or swollen gums)
☒ Tongue (color, surface characteristics, moisture, lesions)
☒ Buccal mucosa (discoloration, Koplik’s spots, leukoplakia)
Physical Assessment of the Head and Neck Interview Data (Subjective )

- **History of:**
  - Headaches
  - Head injury
  - Dizziness
  - Neck pain
  - Lumps or swelling
  - Head or neck surgery

Physical Assessment of the Head and Neck Physical Data (Objective )

- **HEAD**
  - Size and Shape
  - Temporal Area
  - Facial Structures
- **NECK**
  - Symmetry
  - Range of motion
  - Lymph nodes (posterior auricular, prearticular, occipital, jugulodigastric, superficial cervical, posterior cervical, deep cervical, supraclavicular, submandibular, submental)
  - Trachea
  - Thyroid gland

Abnormal Findings

- Abnormalities in head size and contour
- Swellings on the head or neck
- Pediatric facial abnormalities
- Abnormal facial appearances with chronic illnesses

Physical Assessment of the Eyes Structure and function : Eyes

- **External Anatomy**
  Eyebrow, Eyelids (upper and lower), Canthus, Caruncle, Conjunctiva, Lacrimal apparatus, Extraocular muscles
- **Internal Anatomy**
  Sclera, cornea, choroid, pupil, lens anterior chamber, retina, optic disc, retinal vessels

Physical Assessment of the Eyes Interview Data (Subjective )

- **HISTORY of:**
  - Vision difficulty
  - Pain
  - Strabismus or diplopia
  - Redness or swelling
  - Watering or discharge
– Past history of ocular problems, surgery
– Glaucoma
– Use of glasses or contact lenses
– Examinations
– Medications

• Equipment:
  – Snellen eye chart
  – Handheld visual screener
  – Opaque card or occluder
  – Penlight
  – Applicator stick
  – Ophthalmoscope

Physical Assessment of the Eyes Physical Data (Objective)

• Test central visual acuity
  Snellen eye chart
  Near vision

Test visual fields
  Confrontation test

Inspect extraocular muscle function
  Corneal light reflex (Hirschberg test)
  Cover test
  Diagnostic positions test

Inspect external ocular structures
  – General
  – Eyebrows
  – Eyelids and lashes
  – Conjunctiva and sclera
  – Lacrimal apparatus

Inspect anterior eyeball structures
  – Cornea and lens
  – Iris and pupil
  – size and shape
  – pupillary light reflex
  – accommodation

• Inspect the ocular fundus
  – Use of the ophthalmoscope
  – Red reflex
  – Optic disc
    Color
    Shape
  – Retinal vessels
    Number
    Color
  – General background of the fundus
  – Macula

Physical Assessment of the Ears
Structure and function: Ears
• **External Ear**
  - Auricle
  - External Auditory canal
  - Tympanic membrane

**Internal Ear**
- Malleus, Incus, and Staples
- Eustachian tubes
- Functions

**Inner Ear**
- Vestibule, and semicircular canals
- Cochlea

**Physical Assessment of the Ears**

**Interview Data (Subjective)**
- **HISTORY of:**
  - Ear aches
  - Infections
  - Discharge
  - Hearing loss
  - Environmental noise
  - Tinnitus
  - Vertigo
  - Self care

- **Equipment:**
  - Otoscope
  - Tuning fork

**Physical Assessment of the Ears Physical Data (Objective)**
- **External Ear**
  - Size and shape
  - Skin condition
  - Tenderness

**Otoscopic Exam**
- **External canal**
  - color
  - lesions
  - swelling
  - discharge

- **Tympanic Membrane**
  - color
  - characteristics
  - integrity

- **Test hearing acuity**
  - conversational speech
  - voice test
  - tuning fork tests (Weber, Rinne)

- **Vestibular apparatus**
  - Romberg test

**Physical Assessment of the Nose, Mouth, and Throat**

**Structure and function : Nose, Mouth, and Throat**
- **Nose**
  - Function in the respiratory system
  - External nose
  - Nasal cavity
  - Septum
  - Turbinate
  - **Paranasal sinuses**
    - Frontal
    - Maxillary
    - Ethmoid
    - Sphenoid

- **Mouth**
– Function in the digestive and respiratory system
– Hard and soft palates
– Uvula
– Tongue
– Salivary glands
  • Parotid
  • Submandibular
  • Sublingual
  • Teeth
• Throat
  – Oropharynx
  – Tonsils
  – Nasopharynx

Physical Assessment of the Nose Interview Data (Subjective)
• Nose
  – Discharge
  – Frequent colds
  – Sinus pain
  – Trauma
  – Epistaxis
  – Allergies
  – Altered smell
• Mouth and Throat
  – Sores or lesions
  – Bleeding gums
  – Toothache
  – Hoarseness
  – Dysphagia
  – Altered taste
  – Smoking and/or alcohol consumption
  – Self-care behaviors
    • Dental care
    • Dentures or appliances
• Equipment:
  – Otoscope with short, wide-tipped nasal speculum
  – Pen light
  – Two tongue blades
  – Cotton gauze pad
  – Gloves

Physical Assessment of the Nose, Mouth and Throat: Physical Data (Objective)
• Nose
  Inspect and Palpate
  – External nose
  – Test patency of nostril
  – Nasal cavity
  – Nasal septum
- Sinus Areas- Palpate
  Frontal and maxillary sinuses
• Mouth- Inspect
- Lips
- Teeth and gums
- Tongue
- U-shaped areas under the tongue
- Buccal mucosa
- Uvula
- Hard and soft palate

- Throat- Inspect
  - Tonsils
  - Posterior pharyngeal wall

**Objective Data – Lymph Nodes**
- Palpate all 10 nodal areas beginning with the: Preauricular nodes and ending with the Supraclavicular nodes.
- Use gentle pressure and slight circular motion. Palpate both sides simultaneously
- Note enlargements (bi or unilateral) by location, size, mobility, tenderness
- If nodal enlargement – check the area they drain for S/S of inflammation, neoplasm

**Subjective Data- Thyroid**
- History thyroid problems
- Thyroid levels
- Thyroid medication

**Objective Data- Thyroid**
- **Inspect:** note deviations or bulges
  - As person extends neck slightly and swallows water, note upward, symmetrical movement of trachea and other cartilage

- **Palpating Thyroid**
  - Ask person to tilt head slightly to side and palpate lobes.
  - Use fingers on opposite side to displace gland in lateral direction, ask person to swallow: isthmus rises
Physical Assessment of the skin

Structure and Function
- Skin – three layers
  1. Epidermis
     - Stratum germinativum or basal cell layer
     - Stratum corneum or horny cell layer
     - Derivation of skin color
  2. Dermis
     - Connective tissue or collagen
     - Elastic tissue
  3. Subcutaneous layer
     - Epidermal appendages
     1. Hair
2. Sebaceous glands
3. Sweat glands
   - Eccrine glands
   - Apocrine glands
4. Nails

**Function of the Skin**
- Protection
- Prevents penetration
- Perception
- Temperature regulation
- Identification
- Communication
- Wound repair
- Absorption and excretion
- Production of vitamin D

**Subjective Data—Health History Questions**
- Previous history of skin disease (allergies, hives, psoriasis, or eczema)
- Change in mole
- Change in pigmentation (size or color)
- Excessive dryness or moisture
- Pruritus, Rash or lesion
- Excessive bruising
- Medications
- Hair loss
- Change in nails
- Environmental or occupational hazards
- Self-care behaviors

**Equipment needed**
- Strong direct lighting
- Small centimeter ruler
- Penlight
- Gloves

**Objective Data— The Physical Exam**

**Skin—Inspect and Palpate**
- Color
- General pigmentation
- Widespread color change
  - Pallor
  - Erythema
  - Cyanosis
  - Jaundice
- Temperature
  - Hypothermia
  - Hyperthermia
- Moisture
- Diaphoresis
- Dehydration
  - Texture
  - Thickness
Edema
Mobility and turgor
Vascularity or bruising
Lesions
  - Color
  - Elevation
  - Pattern or shape
  - Size
  - Location

**Hair—Inspect and Palpate**
- Color
- Texture
- Distribution
- Lesions

**Nails—Inspect and Palpate**
- Shape and contour
- Consistency
- Color
  - Capillary refill

Summary of subjective and objective data

**Collecting Subjective Data**
Assessing the skin, EXAMINE the following:
- General pigmentation (evenness, appropriate for heritage)
- Systemic color changes (pallor, erythema, cyanosis, jaundice)
- Freckles and moles (symmetry, size, border, pigmentation)
- Temperature (hypothermia, hyperthermia)
- Moisture and texture (diaphoresis, dehydration, firm smooth texture)
- Edema (location and degree)
- Bruising (location, pattern, consistent with history – especially in at risk
- Lesions (color, elevation, pattern or shape, size, location, exudates)
- Hair (normal color, texture, distribution)
- Nails (shape, contour, color)

**Objective Data:**

**Inspection and palpation of the skin**
- Color (pink, cyanotic, jaundiced, erythematous)
- Pigmentation (even, hyper/hypopigmentation)
- Lesions (Describe 3)
- Description – size & color
- Structure - type of lesion (macule, papule, nodule etc.)
- Anatomical Distribution
- Hydration – skin turgor (immediate recoil, tenting)
- Temperature & Moisture

**Inspection and palpation of the hair**
- Color & condition
- Quantity, distribution, & texture

**Inspection and palpation of the fingernails**
- Color of nail bed
- Firmness, texture, ridging, irregularities
- Clubbing:
  - Palpate for firm nail matrix
  - Estimate nail angle