King Saud University
College of Nursing
Medical Surgical Department

NURS 221 HEALTH ASSESSMENT (Practical)

Procedure Guide and Performance Checklist

Module Three

Physical Examination of the Head, Neck and Related Lymphatics

Preparation:

A. Prepare all the necessary equipment
    - Examination gown
    - Clean, nonsterile examination gloves
    - Glass of water
    - Penlight
    - Otoscope
    - Cotton wisp
    - Wooden tongue blade

B. Prepare the patient and the environment.
    - Explain the procedure to the patient.
    - Position the client appropriately.
    - Ensure patient privacy.
    - Instruct patient to drape himself/herself appropriately.
    - Make sure environment is with adequate light and room temperature regulated.
    - Wash hands.

C. Obtain comprehensive health history.
    - Using focused interview, ask the patients questions related to:
        - Pain
        - Safety precautions used at home, when driving or away from home
        - Substance and irritants found in the physical environment of the patient including home, workplace and those encountered during the travel.

D. Conduct physical examination
    - Physical examination of the head and neck requires the use of inspection, palpation and auscultation.

PHYSICAL EXAMINATION TECHNIQUES AND NORMAL FINDINGS

THE HEAD	
Procedure and Rationale	**Normal Findings**
Inspect and Palpate the Skull	
A. Size Note: The general size and shape.	**Normocephalic** – denotes a round symmetric skull that is appropriately related to the body size.
B. Shape To assess shape, place your fingers in the person's hair and palpate the scalp. Note that cranial bones that have normal protrusions are forehead, the side of each parietal bone, the occipital bone, and the mastoid process behind each ear.	Feels smooth and symmetric. No tenderness upon palpation.
C. Temporal Area Palpate the temporal artery above the zygomatic (cheek bone) between the eye and top of the ear. The temporomandibular joint is just above the temporal artery and anterior to the tragus. Palpate the joint as the person opens the mouth.	No tenderness noted. Smooth movement with no limitation or tenderness.
Inspect the Face	
Facial structures Inspect the face, noting the facial expression and its appropriateness to behaviour or reported mood. Although the shape of facial structures may vary somewhat depending on ancestry, features.	Anxiety is common in the hospitalized or ill person. Facial structures should be symmetric. Expect symmetry of eyebrows, palpebral fissures, nasolabial folds and sides of the mouth.

THE EYES	
Procedure and Rationale	**Normal Findings**
Inspect External Ocular Structures	
A. General Note person's ability to move around the room. Note also the facial expression. Inspect the eyes for size, placement, alignment	Vision functioning well enough to avoid obstacles and to respond to your directions. Adequate vision accompanies relaxed expression. All three should be symmetrical
B. Eyebrows Look for symmetry between the two eyes.	Eyebrows are present bilaterally, move symmetrically as the facial expression changes and have no scaling or lesions.
C. Eyelids and Lashes	Upper lids normally overlap the superior part of the iris and approximate completely with the lower lids when closed. The skin is intact without redness, swelling, discharge, or lesions. The palpebral fissures are horizontal in non-Asians, whereas Asians normally have an upward slant. Eyelashes are distributed evenly along the lid margins and curve outward.
D. Eyeballs **Testing eye ball movement** Ask patient to follow the object with his eyes Without moving his head. Nurse moves the object to each of the six cardinal positions, returning to the midpoint after each movement.	Aligned normally in their sockets with no protrusion or sunken appearance. Blacks normally have a slight protrusion of the eyeball beyond the supraorbital ridge.

E. Conjunctiva and Sclera Ask the person to look up. Using your thumbs, slide the lower lids down along the bony orbital rim. Take care not to push against the eyeball. Inspect the exposed area. 	Eyeball looks moist and glossy. Numerous small blood vessels normally show through the transparent conjunctiva. Conjunctiva are clear and show the normal color of the structure below – pink over the lower lids and white over the sclera.
F. Lacrimal Apparatus Ask the person to look down. With your thumbs, slide the outer part of the upper lid up along the bony orbit to expose under the lid. Inspect for any redness or swelling. Normally, the puncta drain the tears into the lacrimal sac. Check this by pressing the index finger against the sac, just inside the lower orbital rim, not against the side of the nose. 	No redness or swelling noted. Pressure slightly everts the lower lid, but there should be no other response to pressure.
Inspect Anterior Eyeball Structures	
A. Cornea and Lens **Shine a light from the side across the cornea for smoothness and clarity.**	No opacities (cloudiness) in the cornea, the anterior chamber, or the lens behind the pupil. Arcus sinilis (with opacity) is normal finding in aging persons.

Testing corneal reflex By lightly touching the cornea with wisp of cotton.	**Blinking is normal reaction**
B. Iris and Pupil **Note size, shape and equality of the pupils.** ***<u>Test the pupillary light reflex</u>*** Darken the room and ask the person to gaze into the distance. (This dilates the pupils.) Advance a light in from the side and note the response. ***<u>Test for accommodation</u>*** Ask the person to focus on a distant object. This process dilates the pupils. Then have the person shift the gaze to a near object such as your finger held about 7 to 8cm (3inches) from the person's nose. Record normal response to these maneuvers as PERRLA or Pupils Equal, Round, React to Light and Accommodation.	Normally appears flat, with a round regular shape and even coloration. The pupils appear round, regular and of equal size in both eyes. Note you will see: 1) constriction of the same-sided pupil (a direct light reflex) 2) and a simultaneous constriction of the other pupil (a consensual light reflex). Normal response includes: 1) pupillary constriction 2) and convergence of the axes of the eyes
Test Central Visual Acuity	
Snellen Eye Chart ***This is the most commonly used and accurate measure of visual acuity. It has lines of letters arranged in decreasing size.*** Place the Snellen alphabet chart in a well-lit spot at eye level. Position the person on a mark exactly 20 feet from	Normal visual acuity is 20/20.

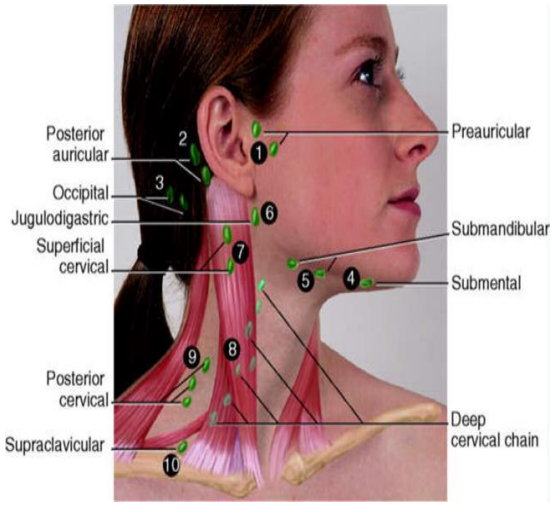
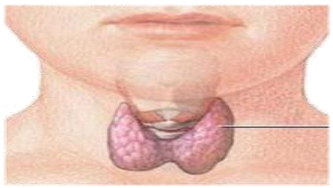
the chart. Use an opaque card to shield one eye at a time during the test. If the person wears glasses or contact lenses, leave them on. Remove only reading glasses because they blur distance vision. Ask the person to read through the chart to the smallest line of letters possible. Encourage trying the next smallest line also.	
Test Visual Fields	
Confrontation Test This test screens for loss of peripheral vision. It compares the person's peripheral vision with your own, assuming that yours is normal. Position yourself at eye level about 2 feet away. Looking straight at you, the person covers one eye with an opaque card as you cover the opposite eye. You are testing the uncovered eye. Hold a wiggling finger as a target midline between you and the person slowly advance it in from the periphery in several directions. Ask the person to say "now" as the target is first seen. For the temporal direction, start your finger somewhat behind the person. Estimate the angle between the anteroposterior axis of the eye and the peripheral axis where the object is first seen.	Normal results are about 50 degrees upward, 90 degrees temporally, 70 degrees inferiorly and 60 degrees nasally.
THE EAR	
Procedure and Rationale	**Normal Findings**
Inspect and Palpate the External Ear	
A. Size and Shape	Equal size bilaterally with no swelling or thickening. Ears of unusual size and shape may be a normal familial trait with no clinical significance.

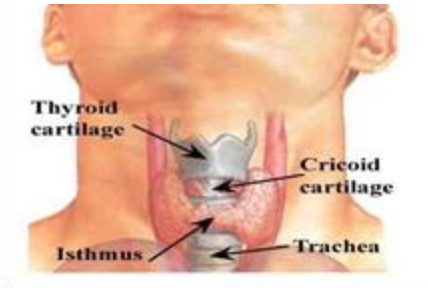
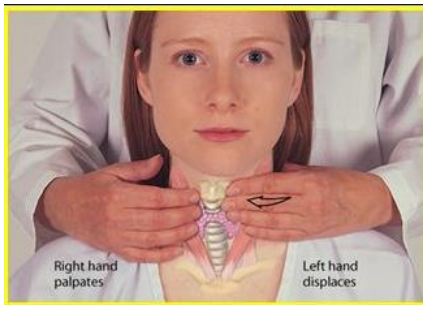
B. Skin Condition	Skin color consistent with the person's facial skin color. Skin is intact, with no lumps or lesions. Darwin's tubercle, a small, painless nodule at the helix is a congenital variation is not significant.
C. Tenderness Move pinna and push on the tragus. Palpate mastoid process.	They should feel firm, and movement should produce no pain. No pain.
D. External Auditory Meatus Note the size of the opening to direct your choice of speculum for the otoscope.	No swelling, redness or discharge should be present. Some cerumen is usually present. Color varies from gray-yellow to light brown and black, and the texture varies from moist and waxy to dry and dessicated.
E. External Canal Note any redness and swelling, lesions, foreign bodies or discharge. If any discharge is present, note the color and odor. For persons with hearing aid, note any irritation on the canal wall from poorly fitting ear molds.	No redness, swelling lesions or foreign bodies is noted.
TEST HEARING ACUITY	
A. Whispered Voice Test Stand arm's length (2 feet) behind the person. Test one ear at a time while masking hearing in the other ear to prevent sound transmission around the head. This is done by placing one finger on the tragus and pushing it in and out of the auditory meatus. Move your head to 1 to 2 feet from the person's ear. Exhale fully and whisper slowly a set of 3	Normally, the person repeats each number/letter correctly after you say it. If the response is not correct, repeat the whispered test using a different combination of 3 numbers and letters. A passing score is correct repetition of at least 3 of a possible 6 numbers/letters.

random numbers, and letters, such as "5,B,6". Assess the other ear using yet another set of whispered items "4,K,2".	
THE NOSE	
Procedure and Rationale	**Normal Findings**
Inspect and Palpate the Nose	
External Nose Inspect for deformity, asymmetry, inflammation, or skin lesions. **<u>Test the patency of the nostrils</u>.** **This reveals any obstruction which later is explored with the nasal speculum.** Push each nasal wing shut with your finger while asking the person to sniff inward through the other naris.	Normally the nose is symmetric, in the midline and in proportion to other facial features. No swelling, inflammation or skin lesions.
Nasal Cavity Attach the short, wide-tipped speculum to the otoscope head, and insert this combined apparaturs into the nasal vestibule, avoiding pressure on the nasal septum. Gently lift the tip of the nose with your finger before inserting. View each nasal cavity with the person's head erct and then with the head tilted back. Inspect the nasal mucosa. Note color, swelling, discharge, bleeding or foreign body. Observe the nasal septum for deviation. Note perforation or bleeding in the septum.	 Normal red color and smooth, moist surface. No swelling, discharge, bleeding or presence of foreign body. No obstruction observed. No bleeding or perforation.
Palpate the Sinus Areas Using your thumbs, press the frontal	 The person should feel firm pressure but no

sinuses by pressing firmly up and under the eyebrows and over the maxillary sinuses below the cheekbones. Take care not to press directly on the eyeballs.	pain.
Test Olfactory nerve Ask patient to close his eyes and block one nostril and inhale a familiar aromatic substance through the other nostril	
THE MOUTH	
Procedure and Rationale	**Normal Findings**
Inspect the Mouth	
Lips Inspect the lips for color, moisture, cracking or lesions. Retract the lips and note their inner surface as well**.**	Moist, soft and pink.
Teeth and Gums *The condition of the teeth is an index of the person's health.* **Inspect teeth and gums. Compare number of teeth with the number expected for the person's age.** **Ask the person to bite as if chewing something and note alignment of upper and lower jaw.**	Teeth normally look white, straight, evenly spaced, and clean and free of debris or decay. Teeth are tight and well defined. Gums look pink or coral with stippled (dotted) surface. Normal occlusion in the back is the upper teeth resting directly on the lower teeth; in the front the upper incisors slightly override the lower incisors.
Tongue Check for color, surface characteristics and moisture. Ask patient to touch the tongue to the roof of the mouth.	Color is pink and even. Dorsal surface is normally roughened from the papillae. A thin white coating may be present. Ventral surface looks smooth and glistening and shows veins.

With a glove, hold the tongue with a cotton gauze pad for traction and swing it out and to each side. Inspect for any white patches or lesions;	No white patches or lesions.
Buccal Mucosa Hold the cheek open with a wooden tongue blade and check the buccal mucosa for color, nodules or lesions. **Palate** Shine your light up to the roof of the mouth**.** **Throat** With your light, observe the oval, rough-surfaced tonsils behind the anterior tonsillar pillar.	Pink, smooth and moist. Although patchy hyperpigmentation is common and normal in dark-skinned people. The more anterior hard palate is white with irregular transverse rugae. Posterior soft palate is pinker, smooth, and upwardly movable. Color is the same pink as the oral mucosa, and their surface is peppered with indentations, or crypts. No exudate on tonsils.
THE NECK	
Procedure and Rationale	**Normal Findings**
Inspect And Palpate the Neck	
Symmetry	Head position is centered in the midline, and the accessory neck muscles should be symmetric. The head should be held erect and still.
Range of Motion (ROM) Note any limitation of movement during active motion. Ask the person to touch the chin to the chest, turn the head to the right and left, try to touch each ear to the shoulder (without elevating shoulders, and extend the head backward**.** **Test muscle strength** and the status of cranial nerve XI by trying to resist the person's movements with your hands, as the person	When the neck is supple, motion is smooth and controlled.

shrugs the shoulders and turns the head to each side.	
Lymph Nodes Using a gentle circular motion of your finger pads, palpate the lymph nodes. Begin with the preauricular lymph nodes in front of the ear, palpate the 10 groups of lymph nodes in a routine order. Be systematic and thorough in your examination. Use gentle pressure because strong pressure could push the nodes into the neck muscles. If any nodes are palpable, note their location, size, shape, delimitation (discrete or matted together), mobility, consistency, and tenderness.  	Normal nodes feel movable, discrete, soft, and non tender.
Trachea Place your index finger on the trachea in the sternal notch and slip it off to each side. 	Normally, trachea is midline, palpate for tracheal shift. The space should be symmetric on both sides. Note any deviation from the midline.
Thyroid Gland	

Inspect the thyroid gland: Position a standing lamp to shine tangentially across the neck to highlight any possible swelling. Tilt the head back to stretch the skin against the thyroid. Supply the person with a glass of water and first inspect the neck as the person takes a sip and swallows.  Palpate the thyroid gland: Posterior Approach: Palpate thyroid by standing behind the client. Put your hands around his neck with your finger tips on the lower half of the neck over the-trachea.  	Thyroid tissue moves up with a swallow and then falls into its resting position. Usually the normal adult thyroid cannot be palpated. If the person has a long thin neck, you sometimes feel the isthmus over the tracheal rings. The lateral lobes usually are not palpable; palpable lobes feel rubbery but smooth.
Inspect External jugular veins Observe with patient sitting and then lying at 30-45 angle. Normal finding:	Jugular veins should be flat, without sign of distention

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NURS 221 HEALTH ASSESSMENT (Practical)
Performance Checklist

Physical Examination of the Head and Neck

Students Name: _____ Rating: _____
Student Number: _____ Date Performed: _____

The student nurse should be able to:

Performance Criteria	Competency Level			
	Done Correctly	Done with Assistance	Not Done	Comments
Preparation				
Explain the procedure to the patient.				
Position the client appropriately.				
Ensure patient privacy.				
Instruct patient to drape himself/herself appropriately.				
Make sure environment is with adequate light and room temperature regulated.				
Wash hands.				
HEAD				
Inspect the person's head for size and shape.				
Palpate Temporal area				
FACE				
Inspect facial structures.				
EYES				
Observe person's ability to move around the room and note facial expression.				
Inspection of External Ocular Structures:				
• Inspect eyebrows for symmetry and movement.				
• Inspect the eyelids and lid margins for swelling, discharge color, scaling and erythema.				
• Inspect eyelashes for hair distribution along the lid margins.				
• Inspect eyeballs for alignment. Test Eyeball movement				
• Inspect conjunctiva & sclera for color,				

• Inspect lacrimal apparatus for swelling & tenderness.				
Inspect Anterior Eyeball Structures				
• Inspect cornea and lens for smoothness and clarity. Test for corneal reflex				
• Inspect iris and pupil for size, shape and equality.				
Test the pupillary light reflex				
Test for accommodation				
Test Central Visual Acuity				
Test Visual Fields				
THE EAR				
Inspect size and shape, skin condition, tenderness.				
Inspect external auditory meatus for swelling, redness or discharge. Inspect external canal for redness and swelling, lesions, foreign bodies or discharge.				
Test Hearing Acuity				
Palpate auricle for pain sensation on movement.				
Palpate mastoid area behind ear for Tenderness.				
THE NOSE				
Inspect external nose for deformity, asymmetry, inflammation, or presence of skin lesions.				
Test the patency of the nostrils.				
Test Olfactory Nerve.				
Inspect the nasal mucosa for color, swelling, discharge, bleeding or foreign body.				
Inspect the nasal septum for deviation, perforation or bleeding.				
Palpate the Sinus Areas.				
THE MOUTH				
Inspect the lips for color, moisture, cracking or lesions.				
Inspect teeth and gums.				
Inspect the tongue and check for color, surface characteristics and moisture.				
Inspect the buccal mucosa for color, nodules or lesions.				
Inspect palate for color and mobility.				
Inspect the throat and note for shape, surface characteristics of tonsils behind the anterior tonsillar pillar.				

THE NECK				
Inspect the neck for symmetry. & range of motion in active motion.				
Test muscle strength.				
Inspect thyroid gland for size and visible mass.				
Inspect external jugular vein.				
Palpate lymph nodes				
Palpate thyroid gland.				
Palpate trachea for tracheal shift.				
Document findings.				

Evaluated by: _____ Date Evaluated: _____

APPENDIX

<table>
<tr><th>Number</th><th>Name</th><th>Function</th><th>Test</th></tr>
<tr><td>I</td><td>Olfactory Nerve</td><td>Smell</td><td><u>Test Olfactory nerve</u>
Ask patient to close his eyes and block one nostril and inhale a familiar aromatic substance through the other nostril Such as (coffee, vanilla, lemon)</td></tr>
<tr><td>II</td><td>Optic Nerve</td><td>Vision</td><td><u>Testing visual acuity</u>
Place the Snellen alphabet chart in a well-lit spot at eye level. Position the person on a mark exactly 20 feet from the chart. Use an opaque card to shield one eye at a time during the test. If the person wears glasses or contact lenses, leave them on. Remove only reading glasses because they blur distance vision. Ask the person to read through the chart to the smallest line of letters possible. Encourage trying the next smallest line also.</td></tr>
<tr><td>III</td><td>Oculomotor Nerve</td><td>pupil constriction

Eye movement;</td><td rowspan="3"><u>Test the pupillary light reflex</u>
Darken the room and ask the person to gaze into the distance. (This dilates the pupils.) Advance a light in from the side and note the response.

<u>Test for accommodation</u>
Ask the person to focus on a distant object. This process dilates the pupils. Then have the person shift the gaze to a near object such as your finger held about 7 to 8cm (3inches) from the person’s nose.
Record normal response to these maneuvers as PERRLA or Pupils Equal, Round, React to Light and Accommodation.

Testing eye ball movement
Ask patient to follow the object with his eyes Without moving his head. Nurse moves the object to each of the six cardinal positions, returning to the midpoint after each movement.</td></tr>
<tr><td>IV</td><td>Trochlear Nerve</td><td>Eye movement</td></tr>
<tr><td>VI</td><td>Abducens Nerve</td><td>Eye movement</td></tr>
<tr><td>XI</td><td>Spinal Accessory Nerve</td><td>Controls muscles used in head movement.</td><td><u>Test muscle strength</u> and the status of cranial nerve XI by trying to resist the person’s movements with your hands, as the person shrugs the shoulders and turns the head to each side.</td></tr>
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