

2023

İSTİNYE UNIVERSITY
MEDICAL FACULTY

III. YEAR
APPLICATION GUIDE
FOR
CLINICAL SKILLS

“Primum non nocere”

*Hippocrates
(B.C. 460 - A.D. 370)*

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İSÜ | İSTİNYE
ÜNİVERSİTESİ
İ S T A N B U L

Revision Nr: v0

Contents

1. Skills of Evaluation of General Condition and Vital Signs	2
2. Skills of Examination Head and Neck	4
3. Skills of Breast and Axilla Examination	6
4. Skills of Cardiovascular System Evaluation and Examination	8
5. Skills of Respiratory System Examination	10

SKILLS OF EVALUATION OF GENERAL CONDITION AND VITAL SIGNS

Aim: To gain the skill of evaluation of general condition and vital signs

Materials: Stethoscope, Sphygmomanometer

STEPS	PERFORMED	NOT PERFORMED
1. Introduced himself/herself and acknowledged the patient about the examination		
2. Evaluated the consciousness of the patient and registered the status of consciousness (conscious, somnolence, stupor, coma)		
3. Determined the orientation (place and time) of the patient by asking appropriate questions		
4. Determined the posture (active, passive, obligatory) of the patient		
5. Watched and evaluated the walking of the patient		
6. Evaluated the talk of the patient		
7. Evaluated the patient's body structure. Registered how the body structure is (obese, thin, normal, cachectic, athletic, picnic, asthenic etc.)		
8. Calculated the body mass index according to the formula [weight(kg)/height ² (m ²)]		
9. Examined edema		
Held the patient's tibia		
Pressed the surface of the tibia with the thumb for 5 – 10 seconds		
Palpated the pressed region for 'godet' formation		
10. Examined subicterus and icterus		
Investigated for color change of the sclera and skin		
11. Investigated anemia		
Investigated the conjunctiva for paleness		
Held the palm of the patient and compared its color with the color of his/her own palm (both should be held at the level of the heart)		
12. Investigated cyanosis		
Investigated for central cyanosis by looking at the mucous membranes and investigated for peripheral cyanosis by looking at the tips of the fingers		
13. Evaluated skin turgor		
Squeezed the ulnar skin of the forearm between the two fingers. Evaluated how quick the skin turns to its previous shape		
14. Evaluated muscle tonus		

Held the hand of the patient up and left it while observing its fall		
VITAL SIGNS		
15. Respiration		
Evaluated for abnormal respirations (dyspnea, tachypnea, apnea, wheezing)		
Evaluated whether the patient is using accessory respiratory muscles		
Evaluated the rhythm and deepness of the respirations for the presence of “irregular and superficial” respirations		
Counted the number of respirations per minute		
16. Pulse		
Palpated the radial pulse of the patient with 3 fingers (2., 3. and 4. fingers)		
Counted the number of pulses per minute		
Evaluated the pulse rhythm		
Evaluated the fullness of the pulse		
Evaluated the stiffness of the pulse		
17. Blood Pressure		
Reminded the patient of not having smoking, caffeine, food, drug intake or exercise 30 minutes before measurement		
Made the patient remain seated and relaxed for 5 minutes		
Adjusted the patient to the right position (sitting with back supported by chair, legs uncrossed, feet flat on floor, bare-arm resting on table, mid-arm at heart level)		
Put the cuff at heart level		
Inflated the cuff above 30-40 mmHg of the point of disappearance of the pulse (or until 200 mm Hg)		
Slowly deflated (2-3 mmHg per second) the cuff		
Registered the appearance of the sounds as systolic blood pressure and the disappearance of the sounds as diastolic blood pressure		
18. Fever		
Inspected whether the patient feels cold, have chills and paleness; palpated the skin for the presence of sweat, heat and humidity		
Checked the body temperature with a thermometer		

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SKILLS OF EXAMINATION HEAD AND NECK

Aim: To gain the skill of examination head and neck by applying the skill steps correctly and in the appropriate order

Materials: Light source, tongue depressor

STEPS	PERFORMED	NOT PERFORMED
1. Washed his/her hands		
2. Introduced himself/herself and acknowledged the patient about the examination		
3. Had the patient sit on a chair or armchair so that the head and neck can be examined comfortably.		
4. Checked for any abnormalities or difficulties in speaking or breathing		
5. Evaluated the patient's head (shape, size, symmetry, mass, signs of trauma, ...)		
6. Evaluated the patient's scalp (hair distribution pattern, presence of mass, color, parasite, ...)		
7. Evaluated the facial area in terms of symmetry and the presence of lesions		
8. Palpated facial bony processes		
9. Palpated the parotid glands		
10. Palpated temporomandibular joints		
11. Gently palpated and percussed the paranasal sinuses a. Frontal sinus just above the eyes b. Ethmoid sinus between two eyes c. Maxillary sinus above the zygomatic process		
12. Checked for a runny nose		
13. Inspected the nasal wings and septum		
14. Inspected the nasal cavity by gently lifting the tip of the nose		
15. Gently palpated the nose		
16. Evaluated both ears for symmetry		
17. Evaluated the auricles		
18. Evaluated mastoid processes		
19. Gently palpated the auricles and both tragi		
20. Evaluated the external auditory canals		
21. Checked the symmetry of the eyeballs		

22. Checked the symmetry of the eyelids		
23. Examined whether the sclera was white or not		
24. Evaluated conjunctiva and checked normal appearance		
25. Checked the symmetry of the pupils and irises		
26. Evaluated whether the movements of the pupils were normal		
27. Evaluated the lips in terms of symmetry and the presence of lesions		
28. Ask the patient to open his/her mouth and evaluate his/her tongue, buccal mucosa, palate and floor of the mouth by using light source and tongue depressor		
29. Palpated anterior cervical, posterior cervical, tonsillar, submandibular, submental and supraclavicular lymph nodes		
30. Evaluated the neck for symmetry		
31. Evaluated the neck for the presence of lesions		
32. Evaluated the neck for the presence of a mass		
33. Moved behind the patient		
34. Placed the middle three fingers of each hand (second, third and fourth) on the midline of the front of the patient's neck, just below the chin		
35. Gently palpated symmetrically until he/she reached the upper point of the thyroid cartilage		
36. Palpated the thyroid cartilage downwards until he/she reached the horizontal groove separating the thyroid cartilage from the cricoid cartilage and found the first tracheal ring		
37. Felt the crico-thyroidal membrane at the level of the midline of the neck in the horizontal groove separating the thyroid cartilage from the cricoid cartilage (the place where emergency intervention is performed in cases of upper airway obstruction)		
38. Continued palpation downwards until he/she felt the second tracheal ring		
39. Palpated by sliding three fingers of both hands towards the outside of the second tracheal ring		
40. Palpated the thyroid gland, located 2-3 cm wide on both sides from the second tracheal ring		
41. Continued to palpate very gently, being aware of the normal thyroid gland was very prominent and not compressible		
42. If the thyroid gland cannot be felt, he/she asked the patient to swallow or drink a sip of water		
43. Evaluated the thyroid gland in terms of growth, symmetry and the presence of nodules		
44. Informed the patient about the examination results		
45. Washed his/her hands		

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SKILLS OF BREAST AND AXILLA EXAMINATION

Aim: To gain the skill of breast and axilla examination by applying the skill steps correctly and in the appropriate order

Materials: Model

STEPS	PERFORMED	NOT PERFORMED
1. Washed his/her hands		
2. Introduced himself/herself and acknowledged the patient about the examination		
3. Made the patient sit on the examination table naked from the waist up		
4. Asked the patient to hang both arms freely at her sides		
5. Checked whether both breasts and nipples are symmetrical		
6. Checked for nipple shrinkage and eczematous lesions on the nipple and areola		
7. Checked whether there was any shrinkage on the skin of both breasts		
8. Asked the patient to put her hands over her head, while checking whether there was any shrinkage on the breast skin		
9. Asked the patient to put her hands on her waist and press, while checking whether there was any shrinkage on the breast skin and whether there was a noticeable mass on the hardened pectoralis major muscle		
10. Asked the patient to lie on his back and placed a pillow under his back on the side to be examined		
11. Hastadan muayene edilecek taraftaki kolu başının altına yerleştirmesini ve başını karşı tarafa çevirmesini istedi		
12. Using the palmar surfaces of the distal phalanx, the 2nd, 3rd and 4th fingers of the active hand palpated the entire breast, including the axillary extension, with circular movements starting from the areola and expanding towards the periphery		
13. (If palpable) Determined the characteristics of the mass such as size, consistency, adhesion to surrounding tissues and mobility		
14. Followed the steps 10 - 13 for the other breast as well		
15. Gently squeezing both nipples, she checked their consistency, elasticity, and whether there was any discharge		
16. Asked the patient to sit down		

17. Holding the patient's arm on the side being examined with the opposite hand, she lifted it to a position parallel to the ground		
18. Placed the other hand on the patient's axilla		
19. Position the patient's arm in a comfortable position so that its weight is supported by the examiner		
20. While the patient's arm was brought from abduction to adduction, completed the axilla examination from top to bottom, using the palmar aspect of the distal phalanges of the fingers in the axilla		
21. If a lymph node was detected, its characteristics such as size, consistency, adhesion to surrounding tissues, mobility and number were determined		
22. Applied steps 17 - 21 for the other axilla as well		
23. Moved to the back of the patient		
24. Asked the patient to turn her head to the side to be examined and palpated the supraclavicular space on that side		
25. If a lymph node is detected, its characteristics such as size, consistency, adhesion to surrounding tissues, mobility and number are determined		
26. Repeated the same procedures for the other supraclavicular space		
27. Informed the patient about the examination results and		
28. Washed his/her hands		

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SKILLS OF CARDIOVASCULAR SYSTEM EVALUATION AND EXAMINATION

OBJECTIVE: To learn the examination of adult cardiovascular system

MATERIALS REQUIRED: Stethoscope

	PERFORMED	NOT PERFORMED
1. Washed hands and informed the patient about the examination		
2. Positioning him/herself to the right side of the patient		
(Inspection)		
3. Inspecting any sign of stress on the patients (anxiety, pain, sweating, abnormal breathing, crying etc.)		
4. Evaluation of any dermatologic – skin lesions on the patient (cyanosis, sweaty or dry skin, edema, ecchymosis, petechia etc.)		
5. Evaluation of the posture, abnormal position or shape of extremity or thorax, presence of pacemaker, looking for scars for previous surgeries such as bypass surgery.		
6. Any finding for specific for cardiovascular disease on neck, head or face (xanthelasma, facies mitrale, musset sign, cyanosis, ecchymosis)		
7. Evaluation of jugular venous pressure (patient at 45 degree, in sitting position and turn the head to the left side)		
8. Abdominal examination, looking for distention, hernia, skin lesions, previous scars from previous surgeries.		
9. Extremity evaluation, looking for edema, nail examination, skin lesions.		
(Palpation)		
10. With warm hands, patient is lying down position. Evaluates the precordial beats (left and right ventricle). Fingers and hand on the midsternal - 5 th intercostal space – midclavicular line to detect the position of ventricular apex.		
11. Patient is in sitting position – evaluated the precordial beat and evaluated the beat and carotid artery synchronization		
12. Evaluates any thrill on the chest wall both in sitting and lying down position		
13. Both in sitting and lying down position – evaluated and detected the position of heart and dullness by percussion starting from axillary line and coming down to the medial area by following intercostal spaces and placed markers by pen.		
(Auscultation)		
14. By warming the stethoscope, started the auscultation		
15. Shows the sites - points for auscultation of the heart on chest wall (used both diaphragm and bell parts of the stethoscope, in sitting, on lean forward, lying down and left side lying down)		
16. Auscultation points;		

17. Aortic: intersection of right border of sternum and second intercostal space		
18. Pulmonary: intersection of left border of sternum and second intercostal space		
19. Erb's point: intersection of right border of sternum and third intercostal space		
20. Tricuspid: intersection of left border of sternum and fourth intercostal space		
21. Mitral: intersection of midclavicular line and fifth intercostal space		
22. Listens and can recognize S1 and S2 together with carotid pulse synchrony		
23. Evaluates strength, intensity and duration of the heart sounds		
24. Evaluates the heart rate, and rhythm		
25. Defines if there are any abnormal heart sounds		
26. Defines if there are any murmur and evaluates the radiation, type and pattern of the murmur.		
27. Performs dynamic auscultation (with various physiologic maneuvers or pharmacologic agents) and re-defines the murmurs.		
28. Evaluates the peripheral pulses (carotid, brachial, radial, femoral, popliteal, dorsalis pedis)		
29. Informs the patients about the findings in the examination		
30. Wash hands		

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SKILLS OF RESPIRATORY SYSTEM EXAMINATION

AIM: To apply the correct examination skills in the appropriate chronological order in aim of attaining the basic examination skills required

MATERIALS REQUIRED: Stethoscope

STEPS	PERFORMED	NOT PERFORMED
1. Wash hands and cleanse stethoscope with alcohol		
2. Thaw stethoscope to avoid irritating patient		
3. Introduce herself/himself, inform about the examination and take permission from the patient		
4. Order the patient to undress chest. Provided the patient with the necessary privacy during the undressing and examination process		
5. Count patients respiratory rate by direct inspection or by placing palm of hand on patients epigastric region for 1 minute		
6. Request patient to join both hands around the waist while seated relaxing shoulders and slightly tilting the head forward		
7. Assess symmetry of both hemithoraces posteriorly		
8. Inspect the Thorax fully and check for any pathology		
9. Request patient to inhale deeply and assess whether both hemithoraces contribute equally to respiration		
10. Use both hands to form pili between the inferior part of scapulae and the midline		
11. Request patient to inhale deeply and palpate and observe whether both hemithoraces are contributing equally to respiration		
12. Repeat the previous step (11.th step) after forming pili with hands at the midline between both clavulae and inframammillary or axillary region		
13. Palpate tracheal rings by placing index fingertip on the jugular incision		
14. Palpate trachea from both right and left sides while measuring distance between sternocleidomastoid muscle and trachea		
15. Place the palm of both hands at the outer border of the scapulae paralel to the vertebrae and inferior tp the scapulae paralel to the costa in a consecutive and symmetrical manner		
16. Request patient to repeat loudly the words “ten-eleven” or “fourty-fourtyone” or “car”		
17. Check the equality of the vibrations between both hemithoraces both anteriorly and posteriorly while the patient is repeating the above words		
18. Spread left hand and place the middle finger on the chest wall		
19. Hit with the middle finger of the right hand the middle finger of the left hand		

at the level of the first interdigital joint by flexing the wrist		
20. Place finger and perform percussion at the patients posterior symmetrically parallel to the spina scapula, between the scapular vertebrae and parallel to them, and then at the intercostal spaces below the scapula		
21. Locate and mark the dullness of the diafragm posteriorly after deep expiration and compare it with the dullness of the diafragm after deep inspiration		
22. Locate the costofrenik sinüs at the lungs basal location by detecting the change of sonor sounds to dullness and place finger on it, then request patient to inspire deeply and hold breath		
23. Check change in percussion sounds after ordering patient to inspire deeply		
24. Perform percussion on the whole anterior chest wall after requesting the patient to lie down on back starting from the below the clavícula down throughout all the intercostal spaces symmetrically		
25. Request patient to inhale and exhale quietly with mouth open		
26. Auscultate the chest wall posteriorly placing the stethoscope and requesting the patient to breath in and out at least once each time		
27. Auscultate the whole chest wall anteriorly posteriorly and laterally in a symmetrical order with a stethoscope		
28. Check whether the respiratory sounds on both hemithoraces are identical and presence of additional sounds		
29. Announce that the physical examination has ended and that the patient may dress up (if necessary help the patient)		
30. Wash hands and clean stethoscope with alcohol		
31. Provide information about the examination to patient		
32. Document findings immaculately on relative forms or computer system		

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