



GAZI UNIVERSITY  
FACULTY OF MEDICINE

# CLINICAL SKILLS EDUCATION

LEARNING &  
EVALUATION GUIDES



# **Gazi University Faculty of Medicine**

## **Clinical Skills Education Council**

Prof. Dr. I. İrem BUDAKOĞLU  
Doç. Dr. Murat HASANREİSOĞLU  
Doç. Dr. Osman KURUKAHVECİOĞLU  
Doç. Dr. Özge Petek ERPOLAT  
Doç. Dr. Utku AYDİL  
Doç. Dr. Kemal FINDIKÇIOĞLU  
Doç. Dr. Dilek ERER  
Doç.Dr. Tolga TATAR  
Öğr. Gör. Dr. Baybars ATAĞLU (BAŞKAN)

2017-2018

## CONTENTS

<b>NAME OF SKILL</b>	<b>PAGE</b>
<b>PHASE 1</b>	
1) Washing hands	
2) Applying and removing sterile gloves	
3) Measuring pulse	
4) Measuring arterial blood pressure	
5) Intramuscular injection	
6) Subcutaneous injection	
7) Intravenous injection	
8) Basic life support and removing a foreign object	
<b>PHASE 2</b>	
1) Starting an intravenous line	
2) Dressing wounds in skin injuries	
3) Applying elastic bandage	
<b>PHASE 3</b>	
1) Throat culture	
2) Inserting female urinary catheter	
3) Inserting male urinary catheter	
4) Inserting a nasogastric catheter	
5) Suturing	

# PHASE 1



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### WASHING HANDS

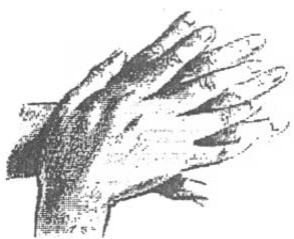
**TOOLS:** Water, soap or cleaning solution, paper towels

**PARTICIPANT:**

Most of our contact with the environment occurs with our hands, and they are the organs with the highest risk of transmitting disease. Therefore, it is imperative to remember to wash your hands and to use the proper technique. When washing hands, use water to wet your hands and then lather them up with soap or cleaning solution. While your hands are foamy, sequentially repeat the steps shown below at least five times. This way, your hands will be thoroughly cleaned.

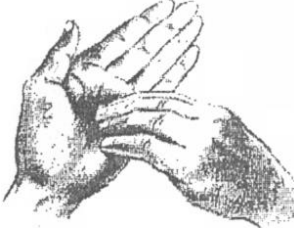


Rub hands together with palms facing each other. Use one palm to rub the back of the other hand and repeat with opposite hand,



Interlock fingers and rub palms together,

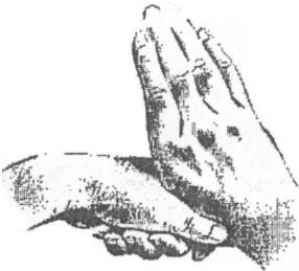
With fingers flexed, rub back of fingers on palm of other



Rub thumb palm of

hand.

each inside other



Rub fingertips on palm of other hand.

After cleaning hands thoroughly, rinse them with water. If there is a screw type faucet in your facility, splash some water onto it to remove soap and turn it off. Faucets with handles are widely used in medical facilities; these should be turned off not with your hands but using your elbows. Dry your hands after washing.

STEP NO	STEPS
1	Roll up sleeves to expose wrists.
2	Remove watch, rings, bracelets and other accessories.
3	Turn on faucet.
4	Wet hands under running water.
5	Put an appropriate amount of soap or cleaning solution on hands.
6	Lather up hands using some water.
7	If using soap, rinse the bar of soap off with water while keeping hands foamy and lay soap down.
8	With remaining foam, repeat the steps described below in the same order by rubbing hands rotationally in every direction:
9	Rub palms of hands together,
10	Rub back of left hand with palm of right hand,
11	Rub back of right hand with palm of left hand,
12	Interlock fingers and rub palms together,
13	With fingers of right hand flexed, rub back of fingers on palm of left hand,
14	With fingers of left hand flexed, rub back of fingers on palm of right hand,
15	Rub right thumb inside palm of left hand,
16	Rub left thumb inside palm of right hand,
17	Rub fingertips of right hand in palm of left hand,
18	Rub fingertips of left hand in palm of right hand,
19	Still using a rubbing motion, rinse your hands completely under running water.
20	Dry hands with paper towel.
21	If faucet is a screw type, remove any soap by splashing water on it and turn it off with used paper towel. Turn off handle-type faucets using your elbow.
22	Throw used paper towel into blue (household) waste bag.





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### WASHING HANDS

**EVALUATION CRITERIAS:**

- A - Competent:** Correct application of the examination steps in their proper sequence
- B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help
- C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

<b>PARTICIPANT:</b>	<b>NO:</b>
---------------------	------------

<b>COACH:</b>	<b>SIGNATURE:</b>	<b>DATE:</b>
---------------	-------------------	--------------

	STEPS	OBSERVATION		
		1	2	3
1	Rolled up sleeves to expose wrists.			
2	Removed watch, rings, bracelets and other accessories.			
3	Turned on faucet.			
4	Wetted hands under running water.			
5	Put an appropriate amount of soap or cleaning solution on hands.			
6	Lathered up hands using some water.			
7	If using soap, rinsed the bar of soap off with water while keeping hands foamy and laid soap down.			
8	With remaining foam, repeated the steps described below in the same order by rubbing hands rotationally in every direction:			
9	Rubbed palms of hands together,			
10	Rubbed back of left hand with palm of right hand,			
11	Rubbed back of right hand with palm of left hand,			
12	Interlocked fingers and rubbeded palms together,			
13	With fingers of right hand flexed, rubbed back of fingers on palm of left hand,			
14	With fingers of left hand flexed, rubbed back of fingers on palm of right hand,			
15	Rubbed right thumb inside palm of left hand,			
16	Rubbed left thumb inside palm of right hand,			
17	Rubbed fingertips of right hand in palm of left hand,			
18	Rubbed fingertips of left hand in palm of right hand,			
19	Still using a rubbing motion, rinsed hands completely under running water.			
20	Dried hands with paper towel.			
21	If faucet was a screw type, removed any soap by splashing water on it and turned it off with used paper towel. Turned off handle-type faucets using his/her elbow.			
22	Threw used paper towel into blue (household) waste bag.			



## LEARNING GUIDE

### APPLYING AND REMOVING STERILE GLOVES

**TOOLS:** Sterile gloves

**PARTICIPANT:**

#### Types of gloves and their uses

**Nylon gloves:** They are made of thin, usually clear nylon. They are used in simple procedures to keep hands clean. Because the gloves are not a tight fit, fine procedures requiring precision cannot be carried out with them. They are more commonly used in the food industry to prevent contamination.

**Examination gloves:** They are made of latex. They are not sterile, come in one size and are sold in packages of many gloves. Because of their tight fit, they are used in our profession very often. Both gloves of a pair are the same.

**Surgical gloves (sterile gloves):** Like the examination glove, they are made of latex. However, the thumbs are slightly retracted to ensure a better fit. Therefore, there are different gloves for your right and left hands. Again, to ensure a better fit, they come in different sizes. Starting from size 7 they increase by half a size and go up to size 8½.



Pay attention to the position of your thumb. Holding the glove by the neck with one hand, advance your other hand into glove until each finger is in its place. Then push hand completely forward.



With your gloved hand, hold other glove by placing fingers under its cuff. Then put glove onto other hand as described in previous step.

NOT: Eldivenlerin ince olduğunu, sert hareketler, keskin cisimler ile delinebileceğini unutmayınız. Hatta eldivenlerin ender de olsa delik çıkabileceğini anımsayınız.



To remove gloves, grasp neck of opposite glove with fingers and create a fold outwards. Pull glove off by pulling it by the neck.



Insert fingers of ungloved hand between opposite wrist and glove so as to fold glove onto itself. Grasp glove from the inside and slide it off.

NOTE: The most commonly made mistake at this step is to grasp the neck of the glove from the *outside* with ungloved hand

STEP NO	STEPS
1	Wash and dry your hands.
2	Choose a pair of gloves with the appropriate size.
3	Make sure the package is intact and check expiration date.
4	Remove external package without tearing the wrapping inside and place internal package on the table.
5	Open the internal package on the table without touching the glove or the inside of the package.
6	With your dominant hand, pick up the opposite glove by the wrist without touching the outer surface of the glove.
7	Turn glove so the thumb is facing forwards. Insert hand into glove and make sure fingers are in their places. After fingers are in their places, pull glove towards your wrist with the other hand.
8	Insert 2nd and 3rd fingers of gloved hand into the folded neck part of opposite glove and remove it from its package without touching the outer surface with your ungloved hand.
9	Turn glove so the thumb is facing forwards. While advancing your hand in the glove, pull the glove by the neck with your gloved hand and make sure your fingers are in place without touching anything else.
10	Pull up folded neck part of the other glove to cover wrist.
11	After completing the procedure, grasp neck of opposite glove with your dominant hand and pull it off without getting skin in contact with outer surface of glove.
12	Throw the glove you removed into red (medical) waste bag
13	Insert fingers of ungloved hand between opposite wrist and glove so as to fold glove. Grasp glove from the inside and slide it off without touching outer surface.
14	Throw glove into red medical waste bag and the packaging into blue waste bag.
15	Wash and dry your hands.





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### WEARING AND REMOVING USED STERILE GLOVES

**EVALUATION CRITERIAS:**

- A - Competent:** Correct application of the examination steps in their proper sequence
- B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help
- C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

<b>PARTICIPANT:</b>	<b>NO:</b>
<b>COACH:</b>	<b>SIGNATURE:</b>
	<b>DATE:</b>

	STEPS	OBSERVATION		
		1	2	3
<b>1</b>	Washed and dried his/her hands			
<b>2</b>	Chose a pair of gloves with the appropriate size.			
<b>3</b>	Be sure the package was intact and checked expiration date.			
<b>4</b>	Removed external package without tearing the wrapping inside and placed internal package on the table.			
<b>5</b>	Opened the internal package on the table without touching the glove or the inside of the package.			
<b>6</b>	With his/her dominant hand, picked up the opposite glove by the wrist without touching the outer surface of the glove.			
<b>7</b>	Turned glove so the thumb was facing forwards. Inserted hand into glove and make sure fingers were in their places After fingers were in their places, pulled glove towards his/her wrists with the other hand.			
<b>8</b>	Inserted 2nd and 3rd fingers of gloved hand into the folded neck part of opposite glove and removed it from its package without touching the outer surface with his/her ungloved hand.			
<b>9</b>	Turned glove so the thumb was facing forwards. While advancing his/her hand in the glove, pulled the glove by the neck with his/her gloved hand and make sure his/her fingers were in place without touching anything else.			
<b>10</b>	Pulled up folded neck part of the other glove to cover wrist.			
<b>11</b>	After completing the procedure, grasped neck of opposite glove with his/her dominant hand and pulled it off without getting skin in contact with outer surface of glove.			
<b>12</b>	Threw the glove and removed into red (medical) waste bag			
<b>13</b>	Inserted fingers of ungloved hand between opposite wrist and glove so as to fold glove. Grasped glove from the inside and slid it off without touching outer surface.			
<b>14</b>	Threw glove into red medical waste bag and the packaging into blue waste bag.			
<b>15</b>	Washed and dried his/her hands.			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### MEASURING PULSE

**TOOLS:** None

**PARTICIPANT:**

STEP NO	STEPS
1	Wash your hands.
2	Inform the patient about the examination and make him/her comfortable.
3	If the patient climbed stairs, walked or is tired etc., tell him/her to rest for 5-10 minutes.
4	Tell patient to take off any clothing that conceals his/her chest wall movements .
5	Stand on the right side of patient.
<b>MEASURING PULSE FROM RADIAL ARTERY</b>	
6	Position the patient so that their right palm faces the ground.
7	Place your 2nd, 3rd and 4th fingers on the radial artery.
8	Palpate the radial artery.
9	After finding the pulse, count the beats for 60 seconds.
10	Note the rate, rhythm and fullness of the beats.





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### MEASURING PULSE AND ARTERIAL BLOOD PRESSURE

**EVALUATION CRITERIAS:**

- A - Competent:** Correct application of the examination steps in their proper sequence
- B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help
- C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

**PARTICIPANT:**

**NO:**

**COACH:**

**SIGNATURE:**

**DATE:**

	STEPS	<u>OBSERVATION</u>		
		1	2	3
	<b>MEASURING PULSE FROM RADIAL ARTERY</b>			
<b>1.</b>	Washed hands.			
<b>2.</b>	Informed the patient about the examination and made him/her comfortable.			
<b>3.</b>	If the patient climbed stairs, walked or is tired etc., told him/her to rest for 5-10 minutes.			
<b>4.</b>	Told patient to take off any clothing that conceals his/her chest wall movements .			
<b>5.</b>	Stood on the right side of patient.			
<b>6.</b>	Positioned the patient so that their right palm faced the ground.			
<b>7.</b>	Placed his/her 2nd, 3rd and 4th fingers on the radial artery.			
<b>8.</b>	Palpated the radial artery.			
<b>9.</b>	After finding the pulse, counted the beats for 60 seconds.			
<b>10.</b>	Noted the rate, rhythm and fullness of the beats.			
	<b>MEASURING ARTERIAL BLOOD PRESSURE</b>			
<b>11.</b>	Measured arterial blood pressure in a quiet, calm environment.			
<b>12.</b>	Informed patient about the procedure.			
<b>13.</b>	Made sure that the patient had not exercised, consumed caffeine, smoked cigarettes or used nose/eye drops 30 minutes prior to the measurement.			
<b>14.</b>	Before the measurement, had the patient sit on a chair (with feet on the ground and arms at level of the heart) for at least 5 minutes.			
<b>15.</b>	The blood pressure measurement should be done with a calibrated sphygmomanometer and stethoscope. (The cuff size of the manometer system you are using is important. A small cuff should be used for children, and a large one for adults. The cuff should be 2/3rds the length of an arm.)			
<b>16.</b>	Made sure the patient's arm is completely exposed. (The upper part of the arm should not be constricted by the rolled up sleeve of the patient's garment)			
<b>17.</b>	Checked the brachial and radial pulses of the arm you would measure from.			
<b>18.</b>	Emptied the cuff completely so that no air was left in it.			
<b>19.</b>	Placed cuff on arm. <ul style="list-style-type: none"> <li>• 2-3 cm above the elbow,</li> <li>• So that it fits snugly, but did not compress the arm</li> <li>• There should be 1 cm between the cuff and skin of arm.</li> </ul>			
<b>20.</b>	Placed stethoscopes in ears so that ear tips faced forward.			

<b>21.</b>	Tapped diaphragm of stethoscope to make sure the system was ready.			
<b>22.</b>	Placed diaphragm on brachial artery without pressing on it. (Did not insert it between cuff and skin so that it would not be under pressure when cuff was inflated)			
<b>23.</b>	Turned off valve of manometer completely and started inflating cuff. <ul style="list-style-type: none"> <li>• Simultaneously palpated radial pulse.</li> <li>• Inflated an additional 15-20 mmHg after the pulse disappears.</li> </ul>			
<b>24.</b>	Stabilized the stethoscope on the brachial artery without compressing it and turned on the valve. The pressure should drop by 2-3 mmHg every second.			
<b>25.</b>	While the pressure drops 2-3 mmHg/sec, <ul style="list-style-type: none"> <li>• Listened for Korotkoff sounds.</li> </ul>			
<b>26.</b>	Took his/her stethoscope off.			
<b>27.</b>	Emptied air from cuff.			
<b>28.</b>	Removed cuff from arm.			
<b>29.</b>	Wrote down the values measured and informed the patient about them.			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### MEASURING ARTERIAL BLOOD PRESSURE

**TOOLS:** Sphygmomanometer, stethoscope

**PARTICIPANT:**

STEP NO	STEPS
1	Measure arterial blood pressure in a quiet, calm environment.
2	Inform patient about the procedure.
3	Make sure that the patient has not exercised, consumed caffeine, smoked cigarettes or used nose/eye drops 30 minutes prior to the measurement.
4	Before the measurement, have the patient sit on a chair (with feet on the ground and arms at level of the heart) for at least 5 minutes.
5	The blood pressure measurement should be done with a calibrated sphygmomanometer and stethoscope. (The cuff size of the manometer system you are using is important. A small cuff should be used for children, and a large one for adults. The cuff should be 2/3rds the length of an arm.)
6	Make sure the patient's arm is completely exposed. (The upper part of the arm should not be constricted by the rolled up sleeve of the patient's garment)
7	Check the brachial and radial pulses of the arm you are going to measure from.
8	Empty the cuff completely so that no air is left in it.
9	Place cuff on arm. <ul style="list-style-type: none"><li>• 2-3 cm above the elbow,</li><li>• So that it fits snugly, but does not compress the arm</li><li>• There should be 1 cm between the cuff and skin of arm.</li></ul>
10	Place stethoscopes in ears so that ear tips face forward.
11	Tap diaphragm of stethoscope to make sure the system is ready.
12	Place diaphragm on brachial artery without pressing on it. (Do not insert it between cuff and skin so that it will not be under pressure when cuff is inflated)
13	Turn off valve of manometer completely and start inflating cuff. <ul style="list-style-type: none"><li>• Simultaneously palpate radial pulse.</li><li>• Inflate an additional 15-20 mmHg after the pulse disappears.</li></ul>
14	Stabilize the stethoscope on the brachial artery without compressing it and turn on the valve. The pressure should drop by 2-3 mmHg every second.
15	While the pressure drops 2-3 mmHg/sec, <ul style="list-style-type: none"><li>• Listen for Korotkoff sounds.</li><li>• The value at which you hear the first sound indicates the systolic blood pressure.</li><li>• The value at which the sounds disappear indicates the diastolic blood pressure.</li></ul>
16	Take your stethoscope off.
17	Empty air from cuff.
18	Remove cuff from arm.
19	Write down the values you measured and inform the patient about them.

Note : To repeat measurement from the same arm, you must wait at least 5 minutes.



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### MEASURING ARTERIAL BLOOD PRESSURE

**EVALUATION CRITERIAS:**

**A - Competent:** Correct application of the examination steps in their proper sequence

**B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help

**C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

**PARTICIPANT:**

**NO:**

**COACH:**

**SIGNATURE:**

**DATE:**

	STEPS	<u>OBSERVATION</u>		
		1	2	3
1.	Measured arterial blood pressure in a quiet, calm environment.			
2.	Informed patient about the procedure.			
3.	Made sure that the patient had not exercised, consumed caffeine, smoked cigarettes or used nose/eye drops 30 minutes prior to the measurement.			
4.	Before the measurement, had the patient sit on a chair (with feet on the ground and arms at level of the heart) for at least 5 minutes.			
5.	The blood pressure measurement should be done with a calibrated sphygmomanometer and stethoscope. (The cuff size of the manometer system you are using is important. A small cuff should be used for children, and a large one for adults. The cuff should be 2/3rds the length of an arm.)			
6.	Made sure the patient's arm is completely exposed. (The upper part of the arm should not be constricted by the rolled up sleeve of the patient's garment)			
7.	Checked the brachial and radial pulses of the arm you would measure from.			
8.	Emptied the cuff completely so that no air was left in it.			
9.	Placed cuff on arm. <ul style="list-style-type: none"> <li>• 2-3 cm above the elbow,</li> <li>• So that it fits snugly, but did not compress the arm</li> <li>• There should be 1 cm between the cuff and skin of arm.</li> </ul>			
10.	Placed stethoscopes in ears so that ear tips faced forward.			
11.	Tapped diaphragm of stethoscope to make sure the system was ready.			
12.	Placed diaphragm on brachial artery without pressing on it. (Did not insert it between cuff and skin so that it would not be under pressure when cuff was inflated)			
13.	Turned off valve of manometer completely and started inflating cuff. <ul style="list-style-type: none"> <li>• Simultaneously palpated radial pulse.</li> <li>• Inflated an additional 15-20 mmHg after the pulse disappears.</li> </ul>			
14.	Stabilized the stethoscope on the brachial artery without compressing it and turned on the valve. The pressure should drop by 2-3 mmHg every second.			
15.	While the pressure drops 2-3 mmHg/sec, <ul style="list-style-type: none"> <li>• Listened for Korotkoff sounds.</li> </ul>			
16.	Took his/her stethoscope off.			
17.	Emptied air from cuff.			
18.	Removed cuff from arm.			
19.	Wrote down the values measured and informed the patient about them.			





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### INTRAMUSCULAR INJECTION

**TOOLS:** Medication, syringe, antiseptic, tampon, gloves

**PARTICIPANT:**

STEP NO	STEPS
1	Wash and dry your hands. Put on gloves.
2	Check the label of the medication you are going to inject and prepare medication and syringe.
3	Imagine a line from the posterior superior iliac spine (the posterior protrusion of the hip bone), to the greater trochanter of the femur. (This line is parallel to the sciatic nerve and is lateral to it)
4	The area you will make the injection is on the upper and outer side of this line, 5-8 cm below the iliac crest.
5	Clean this area with antiseptic solution.
6	With the thumb and 3rd finger of your left hand, hold the skin of this area taut.
7	Hold the syringe in your right hand like you would hold a pen, with a 90 degree angle to the skin.
8	Rapidly and firmly insert the syringe into the skin and advance it towards the muscle. You should reach muscle when $\frac{3}{4}$ ths of the needle is inside.
9	Pull the piston lightly towards yourself; if blood is drawn, quickly pull the syringe out. Replace the needle if possible and repeat procedure.
10	If no blood is drawn when the piston is pulled, slowly inject the medication.
11	When finished, quickly pull the syringe out.
12	Press firmly on the area with a cotton ball soaked in antiseptic solution or gauze.
13	Clean up after yourself: used syringes, needles and any other medical waste goes should be safely disposed of. When finished, take you gloves off and wash your hands.





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### INTRAMUSCULAR INJECTION

**EVALUATION CRITERIAS:**

- A - Competent:** Correct application of the examination steps in their proper sequence
- B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help
- C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

**PARTICIPANT:**

**NO:**

**COACH:**

**SIGNATURE:**

**DATE:**

	STEPS	OBSERVATION		
		1	2	3
<b>1</b>	Washed and dried his/her hands Put on gloves			
<b>2</b>	Checked the label of the medication he/she is going to inject and prepared medication and syringe.			
<b>3</b>	Determined a line from the posterior superior iliac spine, to the greater trochanter of the femur			
<b>4</b>	Determined the upper and outer side of this line to make the injection, 5-8 cm below the iliac crest.			
<b>5</b>	Cleaned this area with antiseptic solution.			
<b>6</b>	With the thumb and 3rd finger of his/her left hand, held the skin of this area taut.			
<b>7</b>	Held the syringe in his/her right hand like he/she would hold a pen, with a 90 degree angle to the skin.			
<b>8</b>	Rapidly and firmly inserted the syringe into the skin and advanced it towards the muscle			
<b>9</b>	Pulled the piston lightly towards him/her; if blood was drawn, quickly pulled the syringe out. Replaced the needle if possible and repeated procedure			
<b>10</b>	If no blood was drawn when the piston was pulled, slowly injected the medication			
<b>11</b>	When finished, quickly pulled the syringe out			
<b>12</b>	Pressed firmly on the area with a cotton ball soaked in antiseptic solution or gauze			
<b>13</b>	Cleaned up used syringes, needles and any other medical waste goes should be safely disposed of			
<b>14</b>	Took off his/her gloves and washed his/her hands			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### SUBCUTANEOUS INJECTION

**TOOLS:** Medication, syringe, antiseptic, tampon, gloves

**PARTICIPANT:**

STEP NO	STEPS
1	Wash and dry your hands and put on your gloves.
2	Determine the area you will do the injection and clean it with a tampon soaked with antiseptic solution by making circular movements from the center towards the periphery.
3	Remove the cap of the syringe and squeeze the skin and subcutaneous tissue of the area you are going to inject with the fingers of your passive hand and pull the tissue away from the body.
4	Hold the syringe as you would a pen or hold it so that it is in your palm pointing downwards.
5	With the needle slant facing upwards, insert into subcutaneous tissue with a 45-90 degree angle.
6	Release the skin and subcutaneous tissue that you are holding with your passive hand.
7	Pull the piston of the syringe towards yourself and make sure you are in subcutaneous tissue. (If blood is drawn, pull the needle out and prepare medication again)
8	Inject medication into subcutaneous tissue.
9	With your passive hand, press lightly with a tampon on the entry point of the needle and pull syringe out with your active hand.
10	Press on the area you injected.
11	After throwing away syringe, needle, cotton etc. into their respective waste bags; take off your gloves and wash your hands.





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### SUBCUTANEOUS INJECTION

**EVALUATION CRITERIAS:**

- A - Competent:** Correct application of the examination steps in their proper sequence
- B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help
- C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

<b>PARTICIPANT:</b>	<b>NO:</b>
---------------------	------------

<b>COACH:</b>	<b>SIGNATURE:</b>	<b>DATE:</b>
---------------	-------------------	--------------

	STEPS	OBSERVATION		
		1	2	3
<b>1</b>	Washed and dried hands and put on gloves.			
<b>2</b>	Determined the area where the injection would be done and cleaned it with a tampon soaked with antiseptic solution by making circular movements from the center towards the periphery.			
<b>3</b>	Removed the cap of the syringe and squeezed the skin and subcutaneous tissue of the area where the injection would be done with the fingers of passive hand and pulled the tissue away from the body.			
<b>4</b>	Held the syringe as you would a pen or hold it			
<b>5</b>	With the needle slanted facing upwards, inserted into subcutaneous tissue with a 45-90 degree angle.			
<b>6</b>	Released the skin and subcutaneous tissue that was holding with passive hand.			
<b>7</b>	Pulled the piston of the syringe towards his / herself and felt that he/she was in subcutaneous tissue. (If blood was drawn, pulled the needle out and prepared medication again)			
<b>8</b>	Injected medication into subcutaneous tissue.			
<b>9</b>	With passive hand, pressed lightly with a tampon on the entry point of the needle and pulled syringe out with active hand.			
<b>10</b>	Pressed on the area injected.			
<b>11</b>	After throwing away syringe, needle, cotton etc. into their respective waste bags; took off gloves and washed hands.			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### INTRAVENOUS INJECTION

**TOOLS:** Medication, syringe, antiseptic, tampon, gloves, tourniquet

**PARTICIPANT:**

STEP NO	STEPS
1	Wash and dry your hands. Put on gloves.
2	Remove syringe from its sterile packaging and attach needle onto it.
3	Tap the ampule to ensure that the medication is in the body part of it. Break the neck of the ampule pushing on the indicated point with your thumb, using a tampon for support.
4	Remove cap of syringe and draw medication into it.
5	Hold the syringe perpendicular to the ground and lightly tap it to move bubbles upward. Lightly push the piston to remove the air bubbles. Replace the cap.
6	Determine the vein to be used. Tie the tourniquet 10-15 cm above the area you would like to use and make sure you do not disrupt the arterial circulation.
7	Clean the area with a tampon soaked in antiseptic solution starting from above and wiping downwards.
8	After removing the cap of the syringe, stabilize the arm with your passive hand and stretch the skin underneath the area you will inject downwards with your thumb.
9	Hold the needle with its slant facing upwards (sharp edge close to skin) and insert with a 35 degree angle.
10	After penetrating skin, advance the needle parallel to skin for 3-5 mm and enter the vein.
11	Advance the needle 2-3 mm inside the vein.
12	Pull the piston with your passive hand and make sure you have entered the vein.
13	If you are inside the vein, remove tourniquet with you passive hand.
14	Slowly inject medication while observing the vein.
15	After the injection, press on the area with a dry tampon and quickly pull out the needle, maintaining the same angle.
16	Continue compressing the area with the tampon to achieve hemostasis.
17	Apply special bandage on the area.
18	Throw syringe into appropriate bin and other supplies into medical waste bag. Wash and dry your hands.





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

<b>EVALUATION GUIDELINE</b>		
<b>INTRAVENOUS INJECTION</b>		
<b>EVALUATION CRITERIAS:</b>		
<b>A - Competent:</b> Correct application of the examination steps in their proper sequence		
<b>B - Sufficient :</b> Correct application of the examination steps in their proper sequence with the help of coach or need help		
<b>C - Needs to be developed :</b> Incorrect application of the examination steps or not application or improper sequence of steps		
<b>PARTICIPANT:</b>	<b>NO:</b>	
<b>COACH:</b>	<b>SIGNATURE:</b>	<b>DATE:</b>

	STEPS	<b>OBSERVATION</b>		
		<b>1</b>	<b>2</b>	<b>3</b>
<b>1</b>	Washed and dried hands. Put on gloves.			
<b>2</b>	Removed syringe from its sterile packaging and attached needle onto it.			
<b>3</b>	Taped the ampule to ensure that the medication was in the body part of it. Broke the neck of the ampule pushing on the indicated point with thumb, using a tampon for support.			
<b>4</b>	Removed cap of syringe and drew medication into it.			
<b>5</b>	Held the syringe perpendicular to the ground and lightly tapped it to move bubbles upward. Lightly pushed the piston to remove the air bubbles. Replaced the cap.			
<b>6</b>	Determined the vein to be used. Tied the tourniquet 10-15 cm above the area would be used and made sure did not disrupt the arterial circulation.			
<b>7</b>	Cleaned the area with a tampon soaked in antiseptic solution starting from above and wiping downwards.			
<b>8</b>	After removing the cap of the syringe, stabilized the arm with passive hand and stretched the skin underneath the area injected downwards with thumb.			
<b>9</b>	Held the needle with its slant facing upwards (sharp edge close to skin) and inserted with a 35 degree angle.			
<b>10</b>	After penetrating skin, advanced the needle parallel to skin for 3-5 mm and entered the vein.			
<b>11</b>	Advanced the needle 2-3 mm inside the vein.			
<b>12</b>	Pulled the piston with passive hand and made sure had entered the vein.			
<b>13</b>	If insided the vein, removed tourniquet with passive hand.			
<b>14</b>	Slowly injected medication while observing the vein.			
<b>15</b>	After the injection, pressed on the area with a dry tampon and quickly pulled out the needle, maintaining the same angle.			
<b>16</b>	Continued compressing the area with the tampon to achieve hemostasis.			
<b>17</b>	Applied special bandage on the area.			
<b>18</b>	Threw syringe into appropriate bin and other supplies into medical waste bag. Washed and dried hands.			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### BASIC LIFE SUPPORT AND REMOVING A FOREIGN OBJECT

**TOOLS:** None

**PARTICIPANT:**

STEP NO	STEPS
1	When you encounter the patient, first make sure you are safe and you are in a safe environment.
2	Keeping in mind the risk of neck (cervical spine) injury, have the patient lie down on a hard surface without being shaken.
3	Stand on the side of the patient.
4	Check if the patient responds: gently shake the patient by the shoulders. Ask loudly, "How are you? Are you OK?" (Do not move patient too much, think of possible cervical injury.)
5	If the patient responded, ask what his/her complaint is and call 112 (emergency ambulance system). If the patient is unresponsive, and you are considering a cardiac problem, call 112 first.
6	However, if you think a respiratory cause is present, or if there is trauma, drowning or poisoning, first complete 5 cycles of CPR (cardiopulmonary resuscitation), and then call 112.
7	Inform the employee on duty at 112 about the patient and event: <ul style="list-style-type: none"> <li>• Address of the emergency (street, building, room number etc.)</li> <li>• The phone number from which you are calling.</li> <li>• What happened (heart attack, stroke, accident etc.)</li> <li>• Number of people in need of help.</li> <li>• Current status of patient and any treatments given</li> <li>• Do not hang up until the 112 official has hung up.</li> </ul>
<b>AIRWAY</b>	
8	Kneel next to the patient and pull open his/her mouth by the chin and check to see if there are any foreign objects inside.
9	If you see a foreign object, wrap a piece of bandage or cloth around your finger and remove the object with a sweeping motion.
10	In patients who have not had any trauma, apply the Head Tilt – Chin Lift maneuver to elevate the tongue, which may be obstructing the airway: <ul style="list-style-type: none"> <li>• By putting one hand on the patient's forehead and the other on the bony protrusion of the lower jaw, push patient's head backwards and the jaw forwards.</li> </ul>
11	For patients with trauma, use the Jaw Thrust maneuver: <ul style="list-style-type: none"> <li>• Kneel by the patient's head</li> <li>• Put each hand on one corner of the lower jaw and push upwards and forwards .</li> </ul>
12	Maintain this position and proceed to Breathing.
<b>BREATHING</b>	
13	<b>Look</b> – Kneel next to the patient and lean slightly forward, so that your cheek is close to the patient's face. Look for up-down movements of chest wall.
14	<b>Listen</b> – Leaning over the patient, bring your ear close to his/her face and try to hear any breath sounds.
15	<b>Feel</b> – Lean over patient and try to feel him/her breathing on your cheek.
16	If the patient is breathing, proceed to Circulation. (Do not assess breathing for more than 10 seconds).

<b>17</b>	If the patient is not breathing, give two effective breaths through his/her mouth, nose or tracheostomy so that the chest wall is elevated for at least 1 second.
<b>18</b>	To give a breath, maintain the patient's position to keep the airway patent and close nostrils with the thumb and 2nd finger of one hand.
<b>19</b>	Take a deep breath and give the breath to the patient slowly for at least 1 second through his/her mouth. (the chest wall should be elevated)
<b>20</b>	An alternative way is to close the patient's mouth by supporting the lower jaw with one hand and giving the breath through his/her nose for at least 1 second.
<b>21</b>	Make sure the air is not escaping.
<b>22</b>	After giving 2 breaths, proceed to Circulation.
<b>CIRCULATION</b>	
<b>23</b>	Kneel next to patient.
<b>24</b>	Palpate the windpipe (trachea) on the patient's neck with one hand; then lightly move your hand to the side to palpate the carotid pulse .
<b>25</b>	Check if there is a pulse. (Do not spend more than 10 seconds on this step)
<b>26</b>	If you feel a pulse, put the patient in recovery position.
<b>27</b>	If there is no pulse, begin chest compressions.
<b>28</b>	For chest compressions, place one hand on the lower half of the chest bone (sternum) and the other hand on top of it.
<b>29</b>	Keep your elbows straight.
<b>30</b>	Your body should move as a whole to transmit your weight through your arms.
<b>31</b>	Start pushing on the sternum so that it is depressed 4-5 cm with every compression.
<b>32</b>	After each compression, let the sternum rise back to its original position.
<b>33</b>	Continue with chest compressions at a speed of 100 compressions/minute.
<b>SINGLE PERSON CPR</b>	
<b>34</b>	Make sure you are safe and assess patient responsiveness.
<b>35</b>	Call 112.
<b>36</b>	Check airway patency.
<b>37</b>	Assess breathing and initiate artificial respiration if needed.
<b>38</b>	Assess circulation; if there is no pulse or evidence of circulation, initiate chest compressions.
<b>39</b>	Proceed with CPR with each cycle consisting of 30 chest compressions and 2 breaths.
<b>40</b>	After 5 cycles are completed, assess ABC (Airway, Breathing, and Circulation).
<b>41</b>	If there is no change, continue with CPR.
<b>42</b>	If the patient has recovered, put him/her in recovery position.
<b>RECOVERY POSITION</b>	
<b>43</b>	If the patient has a pulse and is breathing but has impaired consciousness, lay him/her on his/her back. (Keep in mind the possibility of neck injury)
<b>44</b>	Stand on right side of patient.
<b>45</b>	Place the patient's left hand under his/her right cheek so that the left arm crosses the front of the neck. Put the arm in a 90 degree angle to the body.
<b>46</b>	Flex the patient's left knee.
<b>47</b>	Holding the patient by the shoulder with your left hand and by the hip with your right hand, turn him/her towards yourself.
<b>48</b>	The patient's left knee and elbow should be in contact with the ground.
<b>49</b>	Asses ABC.
<b>50</b>	If the patient will be in recovery position for more than 30 minutes, turn him/her to the opposite side by first laying him/her on the back
<b>51</b>	The patient should wait in recovery position until the ambulance arrives.
<b>52</b>	If there are no signs of circulation or respiration, turn the patient on his/her back and initiate CPR.
<b>53</b>	Make sure you are safe and that the environment is not threatening.





# GAZİ UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### Adult Basic Life Support -2015

**EVALUATION CRITERIAS:**

**A - Competent:** Correct application of the examination steps in their proper sequence

**B -Sufficient:** Correct application of the examination steps in their proper sequence with the help of coach or need help

**C - Needs to be improved:** Incorrect application of the examination step sor not application or improper sequence of steps

**PARTICIPANT:**

**NO:**

**COACH:**

**SIGNATURE:**

**DATE:**

**By the end of this evaluation, participants should have**

STEP		<b><u>PRACTICE</u></b>		
NUMBER		<b>1</b>	<b>2</b>	<b>3</b>
<b>1</b>	Ensured that the patient, the bystanders and the scene are safe			
<b>2</b>	Wore protective gloves if possible.			
<b>3</b>	Support the patient to the ground ( on a firm surface) without being shaken(because of the possibility of neck (cervical) injury)			
<b>4</b>	Kneeled beside the patient			
<b>5</b>	<p>Checked for a response and looked for breathing.</p> <p>5a. Tapped the patient on the shoulder and shouted at the patient "How are you? / Are you all right?" (Did not move the patient in an excessive manner because of the possibility of neck injury (cervical trauma)).</p> <p>5b. Looked for breathing or no normal breathing (ie, only gasping)(opened the airway using head tilt-chin lift maneuver and checked the breathing using look-listen and feel techniques)</p>			
<b>6</b>	<p>Presumed cardiac arrest for patients who are unresponsive and not breathing normally</p> <ul style="list-style-type: none"> <li>Shouted for help</li> <li>Called 112 from mobile phone</li> <li>Called 112 and returned to the patients side if there is no mobile phone</li> </ul>			
<b>7</b>	<p>While phoning 112, he/she gave appropriate information to the dispatcher</p> <ul style="list-style-type: none"> <li>Location of the incident (Street, building, room number, etc.).</li> <li>Gave number of his/her phone.</li> </ul>			

	<ul style="list-style-type: none"> <li>• The events of the incident (heart attack, stroke, traffic accident or etc.)</li> <li>• Number of the patients who need help.</li> <li>• Condition of the patients</li> <li>• Type of aid provided</li> </ul> <p>Did not hang up the phone and activated speaker function of the phone to follow the dispatchers instructions.</p>			
<b>8</b>	Used automated external defibrillator (AED) if available or sent the second rescuer to get one.			
<b>ASSESSMENT AND MANAGEMENT OF CIRCULATION</b>				
<b>(CIRCULATION) (C)</b>				
<b>1</b>	Kneeled beside the patient.			
<b>2</b>	Felt the trachea with his/her right hand in midline and felt the carotid pulse by sliding his/her hand laterally about 3 cm.			
<b>3</b>	Checked for a pulse and regular breathing simultaneously (no more than 10 seconds).			
<b>4</b>	<ul style="list-style-type: none"> <li>• If there was definite pulse and normal breathing monitored the patient and activated EMS</li> <li>• If there was definite pulse without normal breathing gave 1 breath every 6 seconds.</li> <li>• If there was no pulse and no breathing started cardiopulmonary resuscitation(CPR)</li> </ul>			
<b>5</b>	If there was not a definite pulse, started chest compressions while the patient is in supine position.			
<b>6</b>	Placed the heel of his/her dominant hand on the center of the patient's chest (which is 1/2 lower half of the sternum).  (His/her fingers did not touch the rib cage).			
<b>7</b>	Placed the heel of his/her other hand on top of the first hand.			
<b>8</b>	Kept his/her arms straight.			
<b>9</b>	Transferred his/her weight to the arms.			
<b>10</b>	Pressed down on the sternum of the patient at least 5 cm.(not more than 6 cm)			
<b>11</b>	Allowed the chest to completely recoil after each compression.			
<b>12</b>	Repeated the compressions at a rate of 100-120/minute and gave 30 chest compressions hardly and fastly			
<b>ASSESSMENT AND MANAGEMENT OF AIRWAY</b>				
<b>(AIRWAY) (A)</b>				
<b>1</b>	Opened the airway without losing time.			
<b>2</b>	Used <b>Head Tilt-Chin Lift</b> maneuver for the patients without evidence of trauma.			
<b>3</b>	Used <b>Jaw Thrust</b> maneuver for the patients with suspected cervical spine injury or the patient had a trauma.			
<b>4</b>	While maintaining the position of the patient, passed on the breathing step.			

	<b>ASSESSMENT AND MANAGEMENT OF BREATHING</b>			
	<b>(BREATHING) (B)</b>			
<b>1</b>	Delivered two effective rescue breaths to the patient.			
<b>2</b>	Pinched the patient's nose using the index finger and thumb of his/her left hand.			
<b>3</b>	Took a normal (regular) breath (not a deep one) and blew into the patient's mouth slowly taking about 1 second (watched the patient's chest to rise).			
<b>4</b>	In the second way, took a normal breath and gave into the patient's nose taking about 1 second by closing the patient's jaw with his/her right hand. (gave one rescue breath every 6 seconds, 10 breaths/minute)			
<b>5</b>	Checked the exhalation of the air that he/she has delivered.			
	<b>CONTROL</b>			
<b>1</b>	Continued with chest compressions and rescue breaths in a ratio of 30: 2 for 5 cycles.			
<b>2</b>	Checked the vital signs of the patient after 5 cycles of CPR (2 minute).			
<b>3</b>	Changed CPR providers over about every 2 minutes.			
<b>4</b>	Continued CPR if vital signs were absent. As soon as the AED arrived delivered shock for ventricular fibrillation.			
<b>5</b>	Placed the patient in a recovery position if the patient's vital signs have been regained.			
	<b>AUTOMATED EXTERNAL DEFIBRILLATOR (AED)</b>			
<b>1</b>	Continued CPR until AED arrived			
<b>2</b>	As soon as AED arrived switched on the AED and attached the electrode pads on the victims chest as shown on the pads.			
<b>3</b>	Ensured that nobody is touching the victim while the AED is analysing the rhythm.			
<b>4</b>	If a shock is indicated ensured that nobody is touching and pushed the shock button.			
<b>5</b>	After delivering shock without pulse control immediately started CPR (30 chest compressions/ 2 rescue breaths) Continued as directed by the voice/visual prompts.			
<b>6</b>	If no shock is indicated continued CPR.			
	<b>RECOVERY POSITION</b>			
<b>1</b>	Placed the patient who had spontaneous circulation and breathing but abnormal level of consciousness in a position which the patient's back was on the ground (He/she was careful in terms of neck trauma).			
<b>2</b>	Kneeled to the right side of the patient.			
<b>3</b>	Placed the right arm of the patient at 90° to his body, elbow bent with the hand palm-up.			
<b>4</b>	Brought the left arm across the chest, and held the back of the hand against the patient's cheek nearest to him/her.			

<b>5</b>	Grasped the left leg just above the knee and pulled it up, keeping the foot on the ground.			
<b>6</b>	Pulled the patient's shoulder with his/her left hand and hip with right hand and rolled the patient towards him/her.			
<b>7</b>	Adjusted the patient's left elbow and left knee that they might touch the ground.			
<b>8</b>	Made sure that airway, breathing and the circulation of the patient were still secured.			
<b>9</b>	Told that he/she have to turn the patient to the opposite side to relieve the pressure of the lower arm if the patient has to be kept in the recovery position <b>for more than 30 minutes.</b>			
<b>10</b>	Told that he/she have to wait in this position until the ambulance arrived.			
<b>11</b>	Told that he/she have to begin cardiopulmonary resuscitation and must reposition the patient if the patient has no breathing and circulation again.			

# PHASE 2



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### STARTING AN INTRAVENOUS LINE

**TOOLS:** Gloves, tourniquet, i.v. cannula, cotton ball soaked with disinfectant solution, adhesive bandage for fixation

**PARTICIPANT:**

STEP NO	STEPS
1	Wash and dry your hands. Put on your gloves.
2	Tie the tourniquet 10-15 cm above the elbow.
3	Clean the area you will insert the i.v. line with tampon soaked in antiseptic solution in a circular motion or starting from the top wiping downwards.
4	Pull down the skin right below the area you will be using with the thumb of your passive hand.
5	With the needle slant facing upwards, insert the cannula 0,5-1 cm below the vein with a 30-45 degree angle, staying parallel to the vein.
6	After penetrating skin, advance the cannula parallel to the skin for 3-5 mm and enter the vein with a 15 degree angle.
7	Advance the cannula for 2-3 mm inside the vein and pull the needle slightly to see if there is blood in the "flash back" chamber.
8	If there is blood in the chamber, you have entered the vein; if not, repeat the procedure starting from step 5.
9	While pulling the needle towards yourself, advance the polyurethane cannula into the vein.
10	Remove the tourniquet.
11	After the i.v. cannula has been placed, fix it with adhesive bandage.
12	If fluids are to be given, connect the serum set to the cannula; if not, close the cap of the cannula. (When tip of the cannula is open, do not forget to compress the vein with your thumb to stop blood flow)
13	Do not forget to write the date on the adhesive bandage.
14	Throw away waste into appropriate waste bags. Remove your gloves and wash your hands.





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### STARTING AN INTRAVENOUS LINE

**EVALUATION CRITERIAS:**

Using the grading system below, repeat the skill until all steps will be completed correctly, appropriately and without a pause.

**A - Competent:** Correct application of the examination steps in their proper sequence

**B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help

**C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

**PARTICIPANT:**

**NO:**

**COACH:**

**SIGNATURE:**

**DATE:**

	STEPS	OBSERVATION		
		1	2	3
<b>1</b>	Washed and dried the hands. Put on the gloves.			
<b>2</b>	Tied the tourniquet 10-15 cm above the elbow.			
<b>3</b>	Cleaned the area that would be inserted the i.v. line with tampon soaked in antiseptic solution in a circular motion or starting from the top wiping downwards.			
<b>4</b>	Pulled down the skin right below the area that would be using with the thumb of the passive hand.			
<b>5</b>	With the needle slant facing upwards, inserted the cannula 0,5-1 cm below the vein with a 30-45 degree angle, staying parallel to the vein.			
<b>6</b>	After penetrating skin, advanced the cannula parallel to the skin for 3-5 mm and entered the vein with a 15 degree angle.			
<b>7</b>	Advanced the cannula for 2-3 mm inside the vein and pulled the needle slightly to see if there was blood in the "flash back" chamber.			
<b>9</b>	Entered the vein if there was blood in the chamber; if not, repeated the procedure starting from step 5.			
<b>10</b>	While pulling the needle towards oneself, advanced the polyurethane cannula into the vein.			
<b>11</b>	Removed the tourniquet.			
<b>12</b>	After the i.v. cannula had been placed, fixed it with adhesive bandage.			
<b>13</b>	If fluids were to be given, connected the serum set to the cannula; if not, closed the cap of the cannula. (When tip of the cannula was open, did not forget to compress the vein with the thumb to stop blood flow)			
<b>14</b>	Did not forget to write the date on the adhesive bandage.			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### DRESSING WOUNDS IN SKIN INJURIES

**TOOLS:** Intramuscular injection simulator, forearm mannikin for suturing, saline, wound dressing set, antiseptic solution, adhesive bandage

**PARTICIPANT:**

**Note:** In this exercise, we will start from step 12 and learn how to dress a wound.

STEP NO	STEPS
1	Prepare the supplies.
2	Wash your hands.
3	Put on gloves.
4	Cut off the tube of the saline bag that is used to attach serum set with scissors. If you are using a bottle of saline, remove its cap.
5	Compress the remaining tube from the outside with two fingers.
6	Turn bag of saline upside down.
7	Direct the tip of the bag that you are pressing on towards the wound.
8	Hold the tip 5 cm away from the wound without them coming into contact.
9	Loosen your grip on the tube and let some saline flow onto wound.
10	Clean wound thoroughly by irrigating it completely with the saline.
11	Continue cleaning wound until saline bag is empty.
12	Check autoclave band on dressing set.
13	If there are black diagonal lines on autoclave band, open set from the outside, making sure not to touch the inside.
14	Put on sterile gloves.
15	Pick up clamp with your right hand and hold it with the distal phalanges of your 3rd and 4th fingers.
16	Pick up tissue forceps with your left hand and hold it as you would a pen.
17	Grasp gauze with forceps.
18	Fold gauze inside dressing set using the clamp and tissue forceps.
19	Continue holding the gauze with the forceps and grasp the gauze by the intersection of the folds with the clamp in your right hand.
20	Lock clamp and hold it so that the folds of the gauze face upwards.
21	Ask your assistant to pour antiseptic solution on the gauze without contaminating it.
22	End the procedure when the gauze is thoroughly soaked.



<b>23</b>	Wipe the surroundings of the wound with circular motions without touching the inside.
<b>24</b>	Clean edges of wound with circular motions from center to periphery.
<b>25</b>	Throw away gauze.
<b>26</b>	Pick up another gauze with tissue forceps and unfold with the help of clamp.
<b>27</b>	Drape gauze onto wound.
<b>28</b>	Drape one more gauze in the same way.
<b>29</b>	Cut a piece of adhesive bandage that is %50 longer than the gauze and appropriately wide.
<b>30</b>	Stick one half of the gauze onto skin with the adhesive bandage you prepared.
<b>31</b>	Stick other half of gauze with another piece of bandage with the same size.
<b>32</b>	Throw away waste in appropriate waste bins.
<b>33</b>	Wash your hands.
<b>34</b>	Inform the patient.



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### DRESSING WOUNDS IN SKIN INJURIES

**EVALUATION CRITERIAS:**

- A - Competent:** Correct application of the examination steps in their proper sequence
- B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help
- C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

**PARTICIPANT:** \_\_\_\_\_ **NO:** \_\_\_\_\_

**COACH:** \_\_\_\_\_ **SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

	STEPS	<u>OBSERVATION</u>		
		1	2	3
1	Prepared the supplies.			
2	Washed his/her hands.			
3	Put on gloves.			
4	Cut off the tube of the saline bag that was used to attach serum set with scissors. If a bottle of saline was using, removed its cap.			
5	Compressed the remaining tube from the outside with two fingers.			
6	Turned bag of saline upside down.			
7	Directed the tip of the bag that was pressing on towards the wound.			
8	Held the tip 5 cm away from the wound without them coming into contact.			
9	Loosen grip on the tube and let some saline flow onto wound.			
10	Cleaned wound thoroughly by irrigating it completely with the saline.			
11	Continued cleaning wound until saline bag was empty.			
12	Checked autoclave band on dressing set.			
13	If there were black diagonal lines on autoclave band, opened set from the outside, making sure not to touch the inside.			
14	Put on sterile gloves.			
15	Picked up clamp with right hand and hold it with the distal phalanges of 3rd and 4th fingers.			
16	Picked up tissue forceps with left hand and held it as a pen.			
17	Grasped gauze with forceps.			
18	Folded gauze inside dressing set using the clamp and tissue forceps.			
19	Continued holding the gauze with the forceps and grasped the gauze by the intersection of the folds with the clamp in right hand.			

<b>20</b>	Locked clamp and hold it so that the folds of the gauze face upwards.			
<b>21</b>	Asked to pour antiseptic solution on the gauze without contaminating it.			
<b>22</b>	Ended the procedure when the gauze was thoroughly soaked.			
<b>23</b>	Wiped the surroundings of the wound with circular motions without touching the inside.			
<b>24</b>	Cleaned edges of wound with circular motions from center to periphery.			
<b>25</b>	Threw away gauze.			
<b>26</b>	Picked up gauze with tissue forceps and unfolded with the help of clamp.			
<b>27</b>	Draped gauze onto wound.			
<b>28</b>	Draped one more gauze in the same way.			
<b>29</b>	Cut a piece of adhesive bandage that is %50 longer than the gauze and appropriately wide.			
<b>30</b>	Stacked one half of the gauze onto skin with the adhesive bandage you prepared.			
<b>31</b>	Stacked other half of gauze with another piece of bandage with the same size.			
<b>32</b>	Threw away waste in appropriate waste bins.			
<b>33</b>	Washed hands.			
<b>34</b>	Informed the patient.			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### APPLYING ELASTIC BANDAGE

**TOOLS:** Elastic bandage, rescue dummy

**PARTICIPANT:**

STEP NO	STEPS
1	Inform patient about the procedure.
2	Prepare 15-20 cm of bandage for lower extremities and 5,8-10 cm for upper extremities.
3	Ask patient to remove clothing on the limb that will be wrapped.
4	Hold the bandage in your dominant hand and the free end with your opposite hand.
5	Wrap bandage around limb from proximal to distal, covering half of the prior bandage and keeping fingers exposed. Make sure not to wrap too tightly.
6	When applying bandage to joints, draw an '8' by crossing over the joint repeatedly.
7	After you are finished wrapping, fasten the free end of the bandage.
8	You can use these steps when applying bandage to wrist, elbow, ankle and knee joints.
9	When you finish applying the bandage, make sure to check the patient's blood circulation at his/her fingertips.





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### APPLYING ELASTIC BANDAGE

**EVALUATION CRITERIAS:**

**A - Competent:** Correct application of the examination steps in their proper sequence

**B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help

**C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

**PARTICIPANT:****NO:****COACH:****SIGNATURE:****DATE:**

	STEPS	OBSERVATION		
		1	2	3
1	Informed patient about the procedure.			
2	Prepared 15-20 cm of bandage for lower extremities and 5,8-10 cm for upper extremities.			
3	Asked patient to remove clothing on the limb that will be wrapped.			
4	Held the bandage in dominant hand and the free end with opposite hand.			
5	Wrapped bandage around limb from proximal to distal, covering half of the prior bandage and keeping fingers exposed. Made sure not to wrap too tightly.			
6	When applying bandage to joints, drew an '8' by crossing over the joint repeatedly.			
7	After finished wrapping, fastened the free end of the bandage.			
8	When finished applying the bandage, made sure to check the patient's blood circulation at his/her fingertips.			

# PHASE 3



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### THROAT CULTURE

**TOOLS:** Sterile swab, tongue depressor, light source

**PARTICIPANT:**

In this exercise, we will learn how to obtain a throat culture for the differential diagnosis of viral and bacterial nasopharyngeal infection and the appropriate technique to send it to the laboratory.

STEP NO	STEPS
1	Inform the patient about the procedure.
2	Have the patient look at the light source.
3	Tell patient to take deep breaths from the mouth.
4	Take the throat swab out of its tube with your dominant hand, making sure not to contaminate the cotton tip.
5	Press on the patient's tongue with the depressor while he/she is breathing.
6	Swipe the swab on the right tonsil, left tonsil and pharyngeal mucosa with your other hand.
7	If there is exudate/pseudomembrane on the tonsils, firmly rub the edges so that they are partially lifted and obtain samples.
8	Pull out the swab without touching the oral mucosa or saliva with it.
9	Carefully place the tip of the swab into tube.
10	Send the sample to the laboratory as soon as possible.
11	If you cannot send the sample immediately, or it must be transported a long distance, use a transport medium (e.g. Stuart).



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### INSERTING FEMALE URINARY CATHETER

**TOOLS:** Female urethral catheter mannikin, urethral (Foley) catheter, syringe, saline, antiseptic solution, sterile gel, tampon, gloves

**PARTICIPANT:**

STEP NO	STEPS
1	Wash and dry your hands. Prepare supplies. Put on sterile gloves.
2	Clean the area between the perineum and labia majora with gauze soaked in antiseptic solution from front to back. Wipe at least 3 times.
3	Apply sterile gel or vaseline on a gauze and wipe the tip of the Foley catheter with it.
4	Separate the labia majora with the 1st and 2nd fingers of your passive hand while holding the tip of the catheter with your dominant hand. Locate the entrance of the urethra and slowly advance the catheter into it. Keep the catheter parallel to the long axis of the body.
5	Look for urine coming out of the other end of the catheter.
6	After seeing urine flow, advance catheter for at least 4 cm more.
7	Attach urine bag.
8	Inject an appropriate amount of saline into balloon.
9	Slowly pull the catheter to feel the balloon settle at the neck of the bladder; then push the catheter back in 1-2 cm.
10	Hang the urine bag below the level of the bladder. Gather your supplies. Throw away waste into appropriate waste bags. Wash your hands.





# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### INSERTING FEMALE URINARY CATHETER

**EVALUATION CRITERIAS:**

Using the grading system below, repeat the skill until all steps will be completed correctly, appropriately and without a pause.

**A - Competent:** Correct application of the examination steps in their proper sequence

**B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help

**C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

**PARTICIPANT:**

**NO:**

**COACH:**

**SIGNATURE:**

**DATE:**

	STEPS	OBSERVATION		
		1	2	3
<b>1</b>	Washed and dried the hands. Prepared supplies. Put on sterile gloves.			
<b>2</b>	Cleaned the area between the perineum and labia majora with gauze soaked in antiseptic solution from front to back. Wiped at least 3 times.			
<b>3</b>	Applied sterile gel or vaseline on a gauze and wiped the tip of the Foley catheter with it.			
<b>4</b>	Separated the labia majora with the 1st and 2nd fingers of the passive hand while holding the tip of the catheter with the dominant hand. Located the entrance of the urethra and slowly advanced the catheter into it. Kept the catheter parallel to the long axis of the body.			
<b>5</b>	Looked for urine coming out of the other end of the catheter.			
<b>6</b>	After seeing urine flow, advanced catheter for at least 4 cm more.			
<b>7</b>	Attach urine bag.			
<b>8</b>	Injected an appropriate amount of saline into balloon.			
<b>9</b>	Slowly pulled the catheter to feel the balloon settle at the neck of the bladder; then pushed the catheter back in 1-2 cm.			
<b>10</b>	Hanged the urine bag below the level of the bladder. Gathered the supplies. Threw away waste into appropriate waste bags. Washed the hands.			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### INSERTING MALE URINARY CATHETER

**TOOLS:** Male urethral catheter mannikin, urethral (Foley) catheter, syringe, saline, antiseptic solution, sterile gel, tampon, gloves

**PARTICIPANT:**

STEP NO	STEPS
1	Wash and dry your hands. Prepare supplies. Put on sterile gloves.
2	Clean the penis starting from the external urethral meatus in a circular motion with gauze soaked in antiseptic solution. Repeat at least 3 times.
3	Apply sterile gel or vaseline on a gauze and wipe the tip of the Foley catheter with it.
4	Hold the penis with your passive hand while holding the tip of the catheter with your dominant hand and slowly advance the catheter into urethra. Make sure the catheter is parallel to the long axis of the penis.
5	When the tip of the catheter has reached the perineum, place the penis down and continue advancing the catheter parallel to the long axis of the body. Continue advancing the catheter upwards, parallel to the long axis of the body.
6	Look for urine coming out of the other end of the catheter
7	After seeing urine flow, advance catheter for at least 4 cm more.
8	Attach urine bag.
9	Inject an appropriate amount of saline into balloon.
10	Slowly pull the catheter to feel the balloon settle at the neck of the bladder; then push the catheter back in 1-2 cm.
11	Hang the urine bag below the level of the bladder. Gather your supplies. Throw away waste into appropriate waste bags. Wash your hands.



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### INSERTING MALE URINARY CATHETER

**EVALUATION CRITERIAS:**  
Using the grading system below, repeat the skill until all steps will be completed correctly, appropriately and without a pause.

**A - Competent:** Correct application of the examination steps in their proper sequence

**B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help

**C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

<b>PARTICIPANT:</b>	<b>NO:</b>
<b>COACH:</b>	<b>DATE:</b>
<b>SIGNATURE:</b>	

	STEPS	OBSERVATION		
		1	2	3
<b>1</b>	Washed and dried the hands. Prepared supplies. Put on sterile gloves.			
<b>2</b>	Cleaned the penis starting from the external urethral meatus in a circular motion with gauze soaked in antiseptic solution. Repeated at least 3 times.			
<b>3</b>	Applied sterile gel or vaseline on a gauze and wiped the tip of the Foley catheter with it.			
<b>4</b>	Held the penis with the passive hand while holding the tip of the catheter with the dominant hand and slowly advanced the catheter into urethra. Made sure the catheter was parallel to the long axis of the penis.			
<b>5</b>	When the tip of the catheter reached the perineum, placed the penis down and continued advancing the catheter parallel to the long axis of the body. Continued advancing the catheter upwards, parallel to the long axis of the body.			
<b>6</b>	Looked for urine coming out of the other end of the catheter			
<b>7</b>	After seeing urine flow, advanced catheter for at least 4 cm more.			
<b>8</b>	Attached urine bag.			
<b>9</b>	Injected an appropriate amount of saline into balloon.			
<b>10</b>	Slowly pulled the catheter to feel the balloon settle at the neck of the bladder; then pushed the catheter back in 1-2 cm.			
<b>11</b>	Hanged the urine bag below the level of the bladder. Gathered your supplies. Threw away waste into appropriate waste bags. Washed the hands.			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

### INSERTING A NASOGASTRIC CATHETER

**TOOLS:** Nasogastric catheter insertion mannikin, nasogastric catheter, syringe, liquid vaseline, gloves

**PARTICIPANT:**

STEP NO	STEPS
1	Wash and dry your hands. Put on examination gloves.
2	<b>Measurement:</b> Bring the tip of the catheter to the level of the patient's nostrils. With your other hand, extend the catheter to the patient's ear lobes. While holding the catheter at the ear lobes, let go of the end at the nostrils. With your free hand, extend the catheter to the side of the patient's neck, anterior chest, and then to midline at stomach. Hold the catheter by the part which is at xyphoid level. The distance from the nostrils to the ear lobes to the xyphoid process is the length necessary to reach the stomach from the nose.
3	Wipe the measured length of the catheter with a liquid vaseline or other lubricant.
4	Slowly advance the catheter through one nostril.
5	Tell the patient to swallow when he/she feels the catheter in their throat.
6	Slowly continue advancing the catheter up to the measured length.
7	When the marked length is at the level of the nostrils, have someone hold the catheter in place.
8	Attach an appropriate syringe to the tip of the catheter and check to see if gastric fluid is drawn.
9	If you draw fluid, slowly aspirate it until you have emptied all of it.
10	When the stomach is emptied, draw 5 ml of air into syringe.
11	Place your stethoscope on the patient's epigastrium and listen. While you are listening, slowly inject the air in the syringe. If you hear the sound of air passing through liquid, you have reached the stomach. Aspirate the stomach again to empty the air you have injected.
12	Fixate the catheter with adhesive bandage, making sure not to compress the nasal septum and wings.
13	Attach an appropriate extension to the end of the catheter, and attach this to a bottle placed below the level of the patient so that the fluid flows freely.
14	Throw all waste into appropriate waste bags and wash your hands.



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## EVALUATION GUIDELINE

### INSERTING A NASOGASTRIC CATHETER

**EVALUATION CRITERIAS:**  
**A - Competent:** Correct application of the examination steps in their proper sequence  
**B - Sufficient :** Correct application of the examination steps in their proper sequence with the help of coach or need help  
**C - Needs to be developed :** Incorrect application of the examination steps or not application or improper sequence of steps

**PARTICIPANT:** \_\_\_\_\_ **NO:** \_\_\_\_\_

**COACH:** \_\_\_\_\_ **SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

STEP NO	STEPS	<b><u>OBSERVATION</u></b>		
		<b>1</b>	<b>2</b>	<b>3</b>
<b>1</b>	Hands were washed. After drying hands, the examination gloves were put on.			
<b>2</b>	The measurements were made.			
<b>3</b>	The measured length of the catheter was wiped with a liquid vaseline or other lubricant.			
<b>4</b>	The catheter was slowly advanced through one nostril.			
<b>5</b>	The patient was told to swallow when he/she felt the catheter in their throats.			
<b>6</b>	The catheter was slowly pushed up to the measured length.			
<b>7</b>	When the marked length is at the level of the nostrils, someone was told to hold the catheter in place.			
<b>8</b>	An appropriate syringe was attached to the tip of the catheter and it was checked whether the gastric fluid was drawn.			
<b>9</b>	If the fluid was drawn, the fluid was slowly aspirated until all of it has been emptied.			
<b>10</b>	If the no fluid was drawn, 5 ml of air was drawn into syringe.			
<b>11</b>	Stethoscope was placed on the patient's epigastrium and was listened. While listening, the air was slowly injected in the syringe. Then syringe was reused as an aspirator in order to empty the air.			
<b>12</b>	The catheter was fixated with adhesive bandage without making any compress to the nasal septum and wings.			
<b>13</b>	An appropriate extension was attached to the end of the catheter, and this part was attached to a bottle placed below the level of the patient in order to free flow.			
<b>14</b>	All wastes were thrown into an appropriate waste bags and hands were washed.			



# GAZI UNIVERSITY FACULTY OF MEDICINE CLINICAL SKILLS EDUCATION

## LEARNING GUIDE

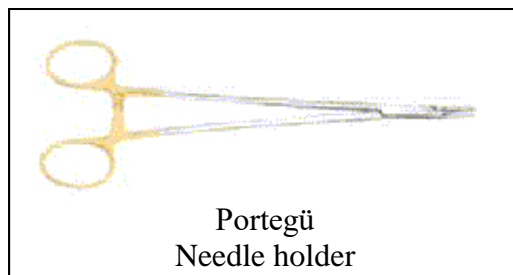
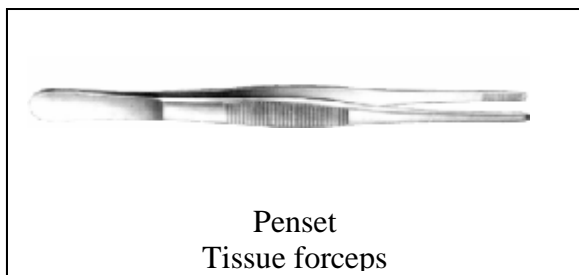
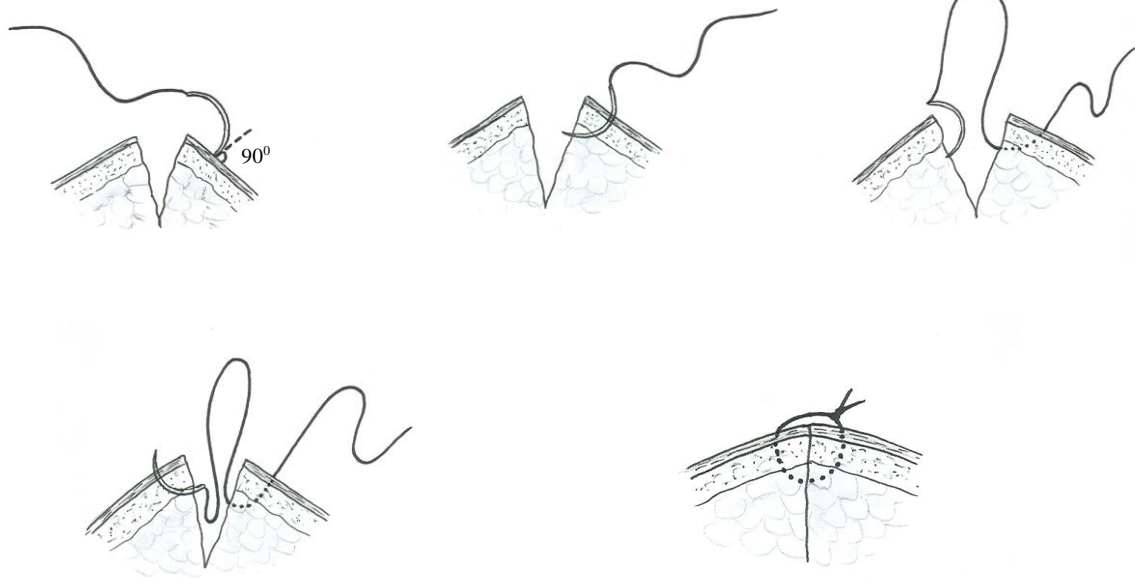
### SUTURING

**TOOLS:** Suturing set, wound suturing cushion, wound suturing cushion holder, suturing supplies, needle holder, tissue forceps, scissors, gloves

**PARTICIPANT:**

STEP NO	STEPS
1	<p>Prepare supplies. Wash and dry your hands. <i>(Skip this step in exercise.)</i> Put on sterile gloves. <i>(Skip this step in exercise.)</i> Clean wound with antiseptic solution. <i>(Skip this step in exercise.)</i></p>
2	<p>Hold needle by posterior 1/3rd with the last 2 mm of the needle holder.</p>
3	<p>Determine the point you will insert the needle, which should be 2-4 mm away from the cut edge of the wound, and insert needle into skin with a 90 degree angle to it. When the needle reaches the dermis, advance the needle with the help of its curvature towards the inside of the wound.</p>
4	<p>Hold the tip of the needle with the tissue forceps and release the needle from the needle holder. Grasp the needle from its posterior end with the needle holder and pull the needle away from the wound with a circular motion of the wrist, again with the help of the curvature of the needle. Hold the free end of the needle with the tissue forceps and grasp the needle with the needle holder once again as you did in step 2.</p>
5	<p>Insert the needle into the other cut edge of the wound with a 90 degree angle to the subcutaneous tissue, making sure that your entry point is at the same depth as the other edge. Using the curvature of the needle, advance the needle until it exits the skin with a 90 degree angle, making sure the distance of the exit point from the edge is the same as the opposite cut edge. Place both tips of tissue forceps on both sides of exit point. Push skin down while continuing to advance the needle . Grasp needle with tissue forceps. Release the needle from the needle holder.</p>
6	<p>Grasp the needle end that has exited the skin with the needle holder. Pull the needle out of the skin with a motion from the wrist using the curvature of the needle. Pull the suture until 2-3 cm are left at the point you began suturing. Release needle from needle holder. Place down your tissue forceps.</p>
7	<p>Hold the suture by the long end with the needle attached to it with your free hand and wrap it around the tip of the needle holder 2 times. Grasp the short free end on the opposite side of the wound and pull the long and short ends to opposite sides, making a crossing motion with your hands. Pull the knot that has formed away from the wound, so that it settles on the point you first entered with the needle. Pull the knot tight until the cut edges come together and slightly heap up on the sides (eversion). Release the free end of the suture from the needle holder.</p>

<b>8</b>	Wrap the suture around the needle holder once in the opposite direction. Grasp the free end of the suture with the needle holder and pull the ends away from each other in the opposite directions as the step before.
<b>9</b>	Repeat these steps until you have 3 or 4 knots.
<b>10</b>	Cut off the ends of the suture with the scissors so 5-7 mm remain.
<b>11</b>	Throw away used supplies into appropriate bins. Wash your hands.





# GAZİ ÜNİVERSİTESİ TIP FAKÜLTESİ KLİNİK BECERİ EĞİTİMİ

## EVALUATION GUIDE

### SUTURING

#### DEĞERLENDİRME KRİTERLERİ:

Aşağıdaki puanlama sistemini kullanarak, tüm basamaklar doğru, sıralı ve duraksamadan yapıp, tümünden tam not alana dek beceriyi yineleyiniz.

**A - Ustalaşmış:** Basamağın duraksamadan ve eğiticinin yardımına gereksinim olmadan doğru olarak ve sırasında uygulanması

**B - Yeterli:** Basamağın doğru olarak ve sırasında uygulanması; ancak eğiticinin yardımına gereksinim duyulması

**C - Geliştirilmesi gerekir:** Basamağın hiç uygulanmaması; yanlış uygulanması ya da sırasında uygulanmaması

**KATILIMCI:**

**NO:**

**GÖZLEMÇİ:**

**İMZA:**

**TARİH:**

BASAMAK NO	BASAMAKLAR	DENEME		
		1	2	3
1	After washing and drying the hands he put the sterile gloves on and clean the wound with the antiseptic solution.			
2	He hold the needle from its posterior 1/3rd with the 2 mm tip of the needle holder.			
3	He determined the point to insert the needle which should be 2-4 mm away from the cut edge of the wound, and inserted needle into skin with a 90 degree angle to it. When the needle reached the dermis, he advanced the needle with the help of its curvature towards the inside of the wound.			
4	He held the tip of the needle with the tissue forceps and released the needle from the needle holder. He grasped the needle from its posterior end with the needle holder and pulled the needle away from the wound with a circular motion of the wrist, again with the help of the curvature of the needle. He held the free end of the needle with the tissue forceps and grasped the needle with the needle holder once again as he did in step 2.			
5	He inserted the needle into the other cut edge of the wound with a 90 degree angle to the subcutaneous tissue, making sure that his entry point was at the same depth as the other edge. Using the curvature of the needle, he advanced the needle until it exit the skin with a 90 degree angle, making sure the distance of the exit point from the edge was the same as the opposite cut edge. He placed both tips of tissue forceps on both sides of exit point. He pushed the skin down while continuing to advance the needle. He grasped needle with tissue forceps. He released the needle from the needle holder.			
6	He grasped the needle end that has exited the skin with the needle holder. He pulled the needle out of the skin with a motion from the wrist using the curvature of the needle.			



	<p>He pulled the suture until 2-3 cm is left at the point he began suturing.</p> <p>He released the needle from needle holder.</p> <p>He placed down his tissue forceps.</p>			
<b>7</b>	<p>He hold the suture by the long end with the needle attached to it with his free hand and wrapped it around the tip of the needle holder 2 times.</p> <p>He grasped the short free end on the opposite side of the wound and pulled the long and short ends to opposite sides, making a crossing motion with his hands.</p> <p>He pulled the knot that has formed away from the wound, so that it settles on the point he first entered with the needle. He pulled the knot tight until the cut edges came together and slightly heaped up on the sides (eversion). He released the free end of the suture from the needle holder.</p>			
<b>8</b>	<p>He wrapped the suture once, around the needle holder on the opposite direction. After holding the free end of the suture with the needle holder, he pulled the suture ends to the opposite side and made a new knot on the previous one.</p>			
<b>9</b>	<p>He repeated the steps and made the third and fourth knots.</p>			
<b>10</b>	<p>He cut both suture ends with the scissors in a way to leave approximately 5-7 mm of suture ends.</p>			
<b>11</b>	<p>He washed his hands after he discarded the wastes and gloves safely into the garbage.</p>			