

Anatomical Language

HASPI Medical Anatomy & Physiology 01b

Review Activity

Background

Knowing the exact body region and/or anatomical position of damage or a disorder is extremely important in medicine. There are many situations when a medical professional needs to communicate a location verbally or in writing. In order to ensure this communication is effective, standard terms are used to describe anatomical locations and regions of the human body. In addition, these descriptions are all based on the human body in a standard anatomical position.

This position has the human body standing with the head, feet, and Palms of the hands all facing forward. An example of this can be seen in the figure to the right. No matter what the position of the actual patient (sitting, lying down, etc.), medical information for a patient will always be communicated describing the patient in the standard anatomical position to avoid any confusion. Since patient information is communicated in these standard terms it is required for all medical professionals, whether they work in a medical office or as a heart surgeon, to know and use them.



<http://www.innerbody.com/htm/body.html>

Materials

“Body Regions” sticker sheet

“Anatomical Positions” sticker sheet

Dictionary (medical preferred)

Procedure

✓ when complete

Step 1	Choose a student in your group to represent the “student model – body regions”.	
Step 2	When you are instructed to do so, remove and apply the body region stickers to their respective locations on your “student model – body regions”.	
Step 3	<i>Please be aware that for some locations will be more appropriate for the student model to apply the stickers themselves - gluteal for example.</i>	
Step 4	Check with your instructor for the correct answers. Remove and place any of the stickers that your group had INCORRECT on the analysis section. This will serve as a reminder of body regions that need to be reviewed.	
Step 5	Choose a second student to represent the “student model – anatomical positions”.	
Step 6	When you are instructed to do so, remove and apply the anatomical position stickers to their respective locations on your “student model – anatomical positions”.	
Step 7	Check with your instructor for the correct answers. Remove and place any of the stickers your group had INCORRECT on the analysis section. This will serve as a reminder of anatomical positions that need to be reviewed.	
Step 8	Complete the analysis questions.	

Analysis

Now that you have applied the body region and anatomical position stickers, check your answers and use your model to answer the following questions on a separate sheet of paper. (**If they have not yet done so, and the models are uncomfortable, they can remove all the stickers at this time*).

Body Regions

Place any INCORRECT stickers for body regions in the box below.

Anatomical Positions

Place any INCORRECT stickers for anatomical positions in the box below.

Review

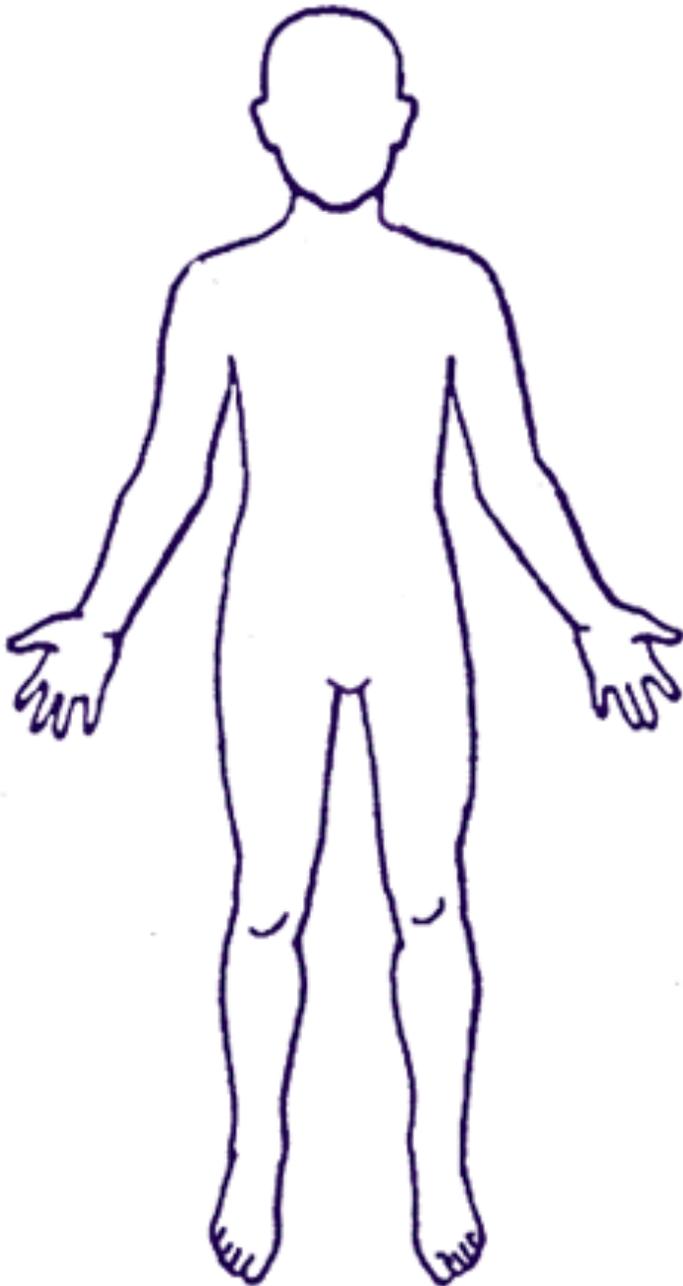
For each of your incorrect stickers write the body region or anatomical position below and then list its location.

Body Region or Anatomical Position	Location
<i>Example: Oral</i>	<i>Mouth</i>

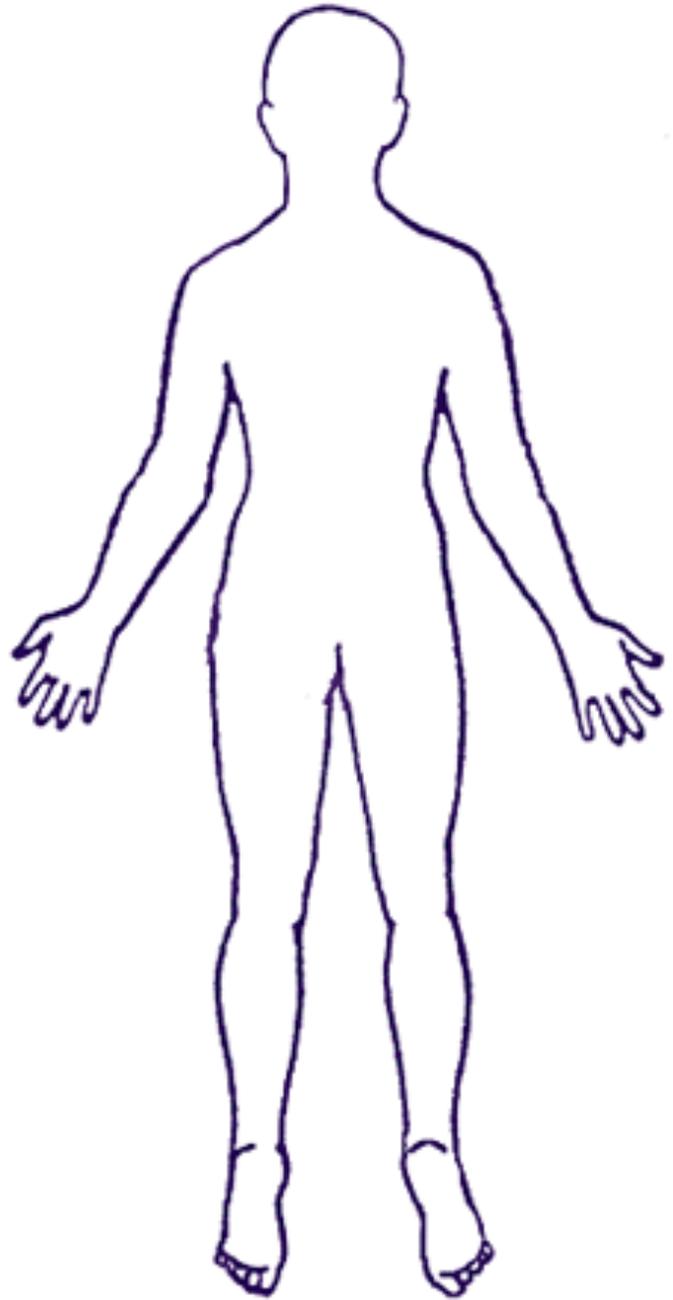
Label the Following Diagrams

Label all of the body regions that were on the stickers in this activity (42 total) on the following diagrams.

FRONT

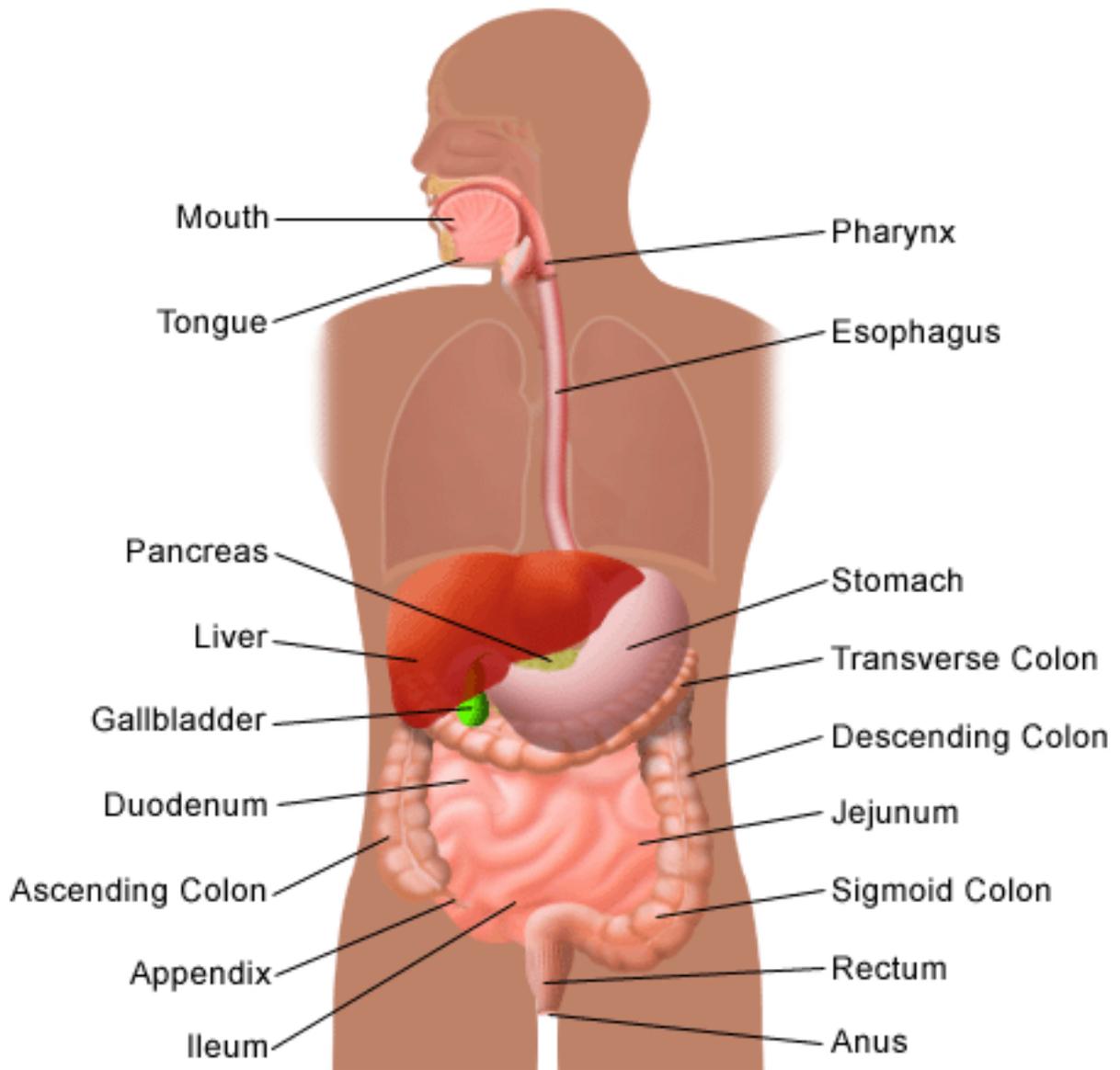


BACK



<http://www.ravenstonedale.org.uk/assets/dynamic/body.gif>

Draw in and label the 4 quadrants AND the 9 regions of the abdomen on the following diagram.



<http://www.jeffersonhospital.org/images/staywell/125532.GIF>

Looking at the diagram above, complete the following table including at least one abdominal organ that is located in each of the 9 abdominal regions.

Abdominal Region	Organs Located
Right Hypochondriac	
	Stomach
	Small Intestine
Left Iliac	

Using Body Regions and Anatomical Positions in Medicine

Knowing body regions and anatomical positions is crucial for a correct diagnosis as well as to communicate with other medical professionals about a patient's progress. The following are directions written to a medical staff of treatment that needs to be carried out for a patient. For each treatment need, explain the instructions in common language. For any terms that are not familiar, use a dictionary (preferably medical) to look up the meaning.

1. 52-year-old male patient entered the ER experiencing shortness of breath, hyperhidrosis, extreme anxiety, and acute severe thoracic pain that radiates distally to the left brachial region. The patient is also experiencing pain in the buccal, mental, and cervical regions. Patient has suffered from angina in the past, and applied a nitroglycerin patch to the right pelvic region that has had no effect. Patient is resistant to thermometer, so temperature must be taken from the axillary region. Angioplasty has been recommended due to past history, and catheter will be inserted in the medial inguinal region where femoral artery is located.
2. 16-year-old male was brought in experiencing nausea, fatigue, dizziness, and muscle pains in the cervical, abdominal, femoral, brachial, sural, dorsal, and gluteal regions. Patient also complains of severe radiating pain in the superior portion of the cephalic region. The patient suffered a short seizure during his soccer game before being brought to the ER. Further assessment showed an increased body temperature, rapid pulse, and a superficial rash extending distally brachial to antebrachial on both upper and lower lateral limbs. Patient is also experiencing intermittent emesis. Treat with 0.9% saline IV inserted at manus region to avoid rash, and wait for further test results.
3. 46-year-old female patient was brought in by ambulance unconscious. Family says patient had been suffering from fever, dizziness, confusion, and tremors for a few days before collapsing at home. Upon further assessment a 6.4 cm deep necrotic laceration was found 2 cm distal of the right popliteal extending laterally towards the upper sural region. Necrotic tissue extends proximally to the transverse plane of the mid-femoral region, distally to the tarsal region, and anterior to posterior engulfing the crural and sural region of the right lower extremity. Hepatic and pulmonary failure due to sepsis has been confirmed. Treatment will include excision of necrotic tissue, which will include the right lower extremity distal of the upper femoral region. Surgery will be followed with IV administration of saline solution, corticosteroids, and antibiotics in the antebrachial region.