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Proper Adjustment of Patient Attire during the Physical Exam

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Overview

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In order to optimize the predictive value of the physical examination, the provider must perform maneuvers correctly. The proper use of drapes is an important component of correctly performing physical examination maneuvers. Skin lesions are missed when "inspection" occurs through clothing, crackles are erroneously reported when the lungs are examined through a t-shirt, and subtle findings on the heart exam go undetected when auscultation is performed over clothing. Accordingly, the best practice standards call for examining with one's hands or equipment in direct contact with the patient's skin (*i.e.*, do not examine through a gown, drape, or clothing). In addition to its clinical value, the correct draping technique is important for improving the patient's comfort level during the encounter.

Like all other aspects of the physical exam, it takes deliberate thought and practice to find the right balance between draping, which is done to preserve patient modesty, and exposure, which is necessary to optimize access to the parts that need examination. Individual provider styles in the use of gowns and drapes vary considerably based on the site of practice, resource availability, and discipline within medicine. This video provides a general overview of some of the most common techniques used, combining techniques that utilize common draping approaches.

Procedure

1. Maneuvers that can be performed while the patient is wearing street clothing

Note that some aspects of the physical exam can be performed on patients while they are wearing street clothing that permits exposure of the region to be inspected. These maneuvers include the measurement of the vital signs, general appearance, the HEENT (Head, Eyes, Ears, Nose, and Throat) exam, the neck exam, the abdominal exam, the vascular exam, and the neurological exam.

1. To take a measurement of the vital signs, make sure to have access to the patient's arms.
2. In order to perform the basic HEENT maneuvers, instruct the patient to remove any hats, dentures (if a thorough exam of a patient's oral mucosa is necessary), eyeglasses (while examining the eyes), and hearing aids (if a thorough ear exam is necessary). The HEENT exam can be performed regardless of what a patient is wearing from the neck down. Keep in mind that functional assessment of speech, visual acuity, and hearing is done best with dentures, glasses, and hearing aids in place.
3. Make sure the clothing permits the ability to inspect and palpate the neck and supraclavicular regions (an adequate neck examination can be performed in a patient who's wearing a loose-fitting shirt or a tank top).
4. The clinician can examine the abdomen in a patient wearing loose-fitting clothing. Instruct the patient to have their pants rolled down to expose the lower abdomen and their shirt raised up to provide optimal exposure.
5. For the vascular exam, make sure to have access to the site where each pulse is located. For all upper and lower extremity pulses other than femoral, loose-fitting sleeves or pant legs can be raised up when needed. Socks must be removed for pedal pulses.
6. All aspects of the neurologic examination can be performed on a patient who's wearing clothing that permits inspection and palpation of the extremities. Be sure to remove a patient's shoes and socks.
7. Most musculoskeletal regions can be examined in patients wearing t-shirts and shorts. The shoulder examination is best done in a patient who is shirtless (or in a bra only) or wearing a tank top, as visual inspection and provocative range of motion testing cannot be easily done simultaneously in a patient wearing a gown.

2. Offering the gown and drape

1. Certain patients may find it acceptable to be examined while shirtless, which provides optimal access to the structures in the neck, thorax, and abdomen. In the interest of avoiding unnecessary exposure of women's breasts, clinicians often conduct the examination with the patient wearing a bra or by using draping techniques with a gown. This video demonstrates the draping technique for a patient who has been instructed to remove their bra.
2. Provide instructions on what to do with the gown and drape (*e.g.*, "In order to examine you today, I'm going to ask you to change into this gown. Keep it open in the back. You can leave your underwear on, but please remove your other clothing including your bra. You can cover yourself with this drape to keep warm.").
3. Step out of the room while the patient changes, unless the patient needs help getting changed due to mobility limitations, and let the patient know how long you'll be gone. Experienced providers may tend to another task while the patient is changing, which patients typically don't mind, as long as they know when to expect your return.

3. The sensitive use of gown and drape in various physical exam maneuvers

1. With the patient seated on the exam table, start the exam with the gown fastened, typically in the back, and offer a drape to cover the patient's lap and legs for warmth and use in subsequent maneuvers.
2. Examination of the neck, anterior chest, and heart in a patient wearing a hospital gown - draping techniques are similar for all of these maneuvers in the seated, supine, and standing positions.

3. Untie the gown at the back of the neck.
4. Instruct the patient to lower the gown slightly at the shoulders to allow optimal examination of the lower neck and clavicles.
5. Cardiac and Respiratory Exam
 1. Ask the patient to lower the gown a few inches further, while keeping their breasts covered. This allows for adequate exposure for inspection, percussion, palpation, and auscultation on the anterior chest and anterior lung zones, as well as inspection, palpation, and auscultation of the pulmonic and aortic regions of the heart.
 2. Slightly lower the gown at the sternum to allow for auscultation at Erb's point and the tricuspid area. Examination of the tricuspid area can also be done via an alternative approach, as described below.
 3. Replace the gown over the shoulders when this portion of the exam is finished.
 4. After informing the patient that the "bottom part of their heart" is to be examined next, raise their gown, or instruct the patient to raise it, to expose the left flank and left upper quadrant of the abdomen to gain access to the fifth left intercostal space at the mid-clavicular line (mitral area). If the patient's left breast is impeding access to this area, use the back of your left hand to displace the breast or ask the patient to lift the bottom of their left breast out of the way.
 5. For an alternative approach to examining the tricuspid area, with the left upper quadrant, slightly lift the gown at the inferior border of the sternum.
 6. With the flank and left upper quadrant exposed, and the patient holding their left breast and gown out of the way with their right hand, examine the mitral area with the patient in the left lateral decubitus position.
 7. To examine the posterior and lateral thorax in a seated position, move the folds of the gown laterally to allow for adequate exposure for the inspection, percussion, palpation, and auscultation of the posterior chest, back, and posterior lung zones.
 8. Displace the gown further, laterally and one side at a time, as needed to allow for the examination of the lateral chest walls.
 9. Examination of the back can be performed in a patient who is shirtless (or only in a bra) or wearing a gown that's open in the back. If the patient is wearing a gown, perform the seated inspection as described previously.
6. Gait and Standing Range of Motion Testing
 1. During gait or standing range of motion (e.g., forward flexion) testing, hold the back of the gown together, so the patient can concentrate on the movement (rather than on worrying about the gown falling off).
 2. Replace the gown to cover the back and retie the neck straps when this portion of the exam is finished.
7. Abdominal examination
 1. Place the drape over the patient's legs and pelvis.
 2. With the patient in the supine position, lift (or have the patient lift) the gown just below the level of the breasts, simultaneously securing the drape, so it keeps the patient's pelvis covered. This technique is called "double draping," or simultaneous use of the gown and drape to leave the chest, legs, pubic, and inguinal regions covered, while examining the abdomen or lower chest.
 3. All standard aspects of the abdominal exam can be performed with this exposure, except for the percussion of the liver from the superior approach, which requires additional displacement of the gown on the right side of the lower chest. The patient may need to lift their right breast superiorly to allow access for percussion.
8. Femoral Artery and Inguinal Nodes
 1. Palpation and auscultation of the femoral artery generally requires the patient to be in a gown. While it is possible to palpate the pulse over a thin layer of clothing, this is not optimal, and auscultation cannot be done this way.
 2. To perform both palpation and auscultation, move the drape medially or lower the drape or pants sufficiently to allow the examiner access from a superior approach, examining one side at a time and replacing the drape before moving to the other side.
 3. Note that examination of the inguinal lymph nodes can be done in the same way.
 4. Replace the gown when these maneuvers are finished being performed.
9. Musculoskeletal System of the Lower Extremities
 1. If a patient is wearing a gown and the lower extremities need to be examined while the patient is supine, place the draping sheet between the patient's legs, so each leg and hip can be easily uncovered and directly examined, which limits the exposure of areas not being actively examined.
10. Skin
 1. A complete skin examination requires sequential displacement of the gown to expose all areas of interest, while keeping other regions covered with the gown and drape. The skin of the breasts, pelvis, and gluteal regions are typically examined in this process, as well. Refer to the videos on the genitourinary exam and female breast exam for descriptions of draping techniques for these components of the exam.

The Sensitive Use of Drapes and Gowns During the Physical Examination

Important points to remember:

- Do not examine through a gown, drape, or clothing
- Try not to reach under a patient's gown or clothing during the exam
- Only expose the area of the body being directly examined at a given time
- Let the patient know when you are going to move the gown or drape
- If possible, empower the patient to help move the gown and drape, which allows the patient some control over the degree of exposure
- When you complete the examination of an exposed area, replace the gown or drape
- Limit exposure times for sensitive areas (e.g., anterior chest, inguinal region), but do not compromise the exam as a result
- If you have untied the gown during the exam, remember to retie it before inviting the patient to step down from the table

Figure 1: General considerations for the sensitive use of drapes and gowns

Summary

The sensitive use of gowns and drapes during the physical examination is important to strike a balance between patient comfort and exposure (**Figure 1**). The examination should not be compromised out of the clinician's concern for patient exposure, since the proper use of draping allows for the proper exam to be performed in most clinical circumstances. Examination through clothing, sheets, or gowns is incorrect technique, though only the areas of the body being directly examined at a given time need to be exposed, and once an area has finished being examined, a clinician should replace the drape or clothing before moving on to the next area. An examiner shouldn't reach under a gown or clothing to examine a patient, and they should enlist the patient's help in moving the gown or drape throughout the exam, as this allows the patient to maintain some control over the degree of exposure. Letting the patient know what is about to be done before moving a gown or drape is also important, as proper communication puts the patient at greater ease. If a clinician has tied the gown during the exam, they should retie it before asking the patient to step down from the table. The handful of draping techniques demonstrated in this video can be used together for all the standard parts of the physical examination. As with all the other aspects of the physical examination, developing comfort and individual stylistic variations in draping technique takes deliberate practice.