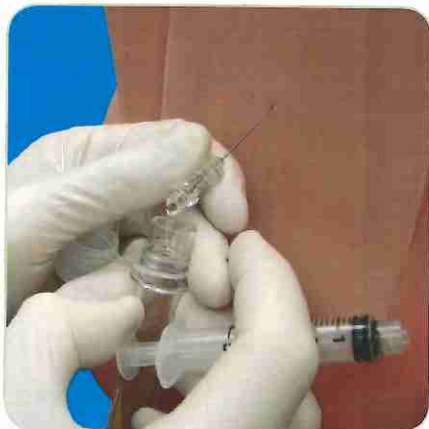


PRODUCT OVERVIEW

The Lumbar Puncture / Epidural Trainer is an ultrasound compatible trainer that includes the lumbar vertebrae, iliac crest, spinous process, ligamentum flavum, epidural space, and dura. The trainer can be positioned in an upright sitting or a lateral decubitus position.



The lumbar puncture procedure allows the user to penetrate the subarachnoid space and CSF is present when the stylet is removed.



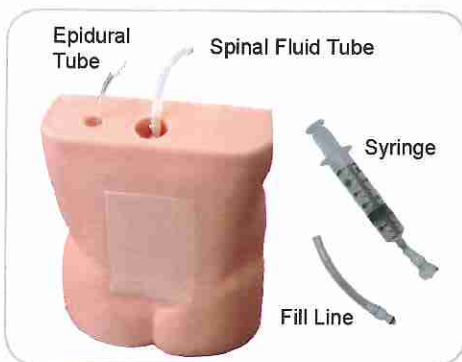
The epidural procedure allows the user to enter the epidural space and insert an epidural catheter.

PRODUCT COMPONENTS

The Lumbar Puncture / Epidural Trainer's replaceable tissue includes two tubes: the spinal fluid tube and the epidural tube.

The spinal fluid tube comes pre-filled with fluid and the epidural tube acts as a drain should any of the spinal or saline fluid enter the epidural space.

A syringe and fill line are provided if additional fluid needs to be added to the spinal fluid tube.



Visit www.simulab.com for a video version of the following information. If you are not already a "User" on Simulab's website, you will need to register prior to accessing the video.

LUMBAR PUNCTURE PROCEDURE

1. The tissue comes pre-filled with fluid. After multiple procedures, additional fluid may need to be added. To do this, attach the provided syringe to the tube, remove any air, and add fluid as needed. Pressurize it slightly and remove the syringe. Once filled, detach the syringe.



2. If additional water needs to be added to the syringe, attach the provided fill line.

Add fluid to the syringe by putting the syringe with the fill line into a container of water and pulling back on the plunger.



3. Pull the syringe and fill line out of the container slowly- some fluid will drain from the fill line.



4. When finished, detach the fill line and reconnect the syringe to the tissue to add fluid or pressure as needed.



EPIDURAL PROCEDURE

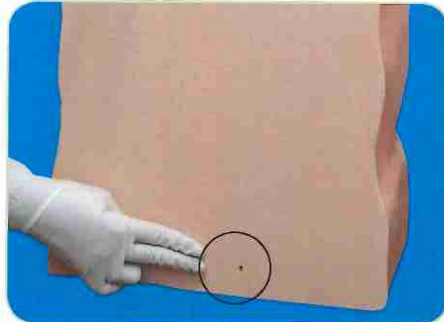
1. If the trainer has already been used to perform the lumbar puncture procedure, water may have entered the epidural space and should be flushed prior to performing the epidural procedure.



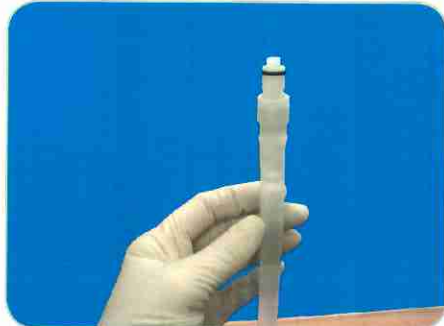
2. To flush the fluid from the epidural space, pull the plunger out on an empty syringe (not provided) and attach it to the epidural drain tube at the top of the body form. Press the plunger.



3. Small amounts of fluid may leak from the opening in the back of the body form.

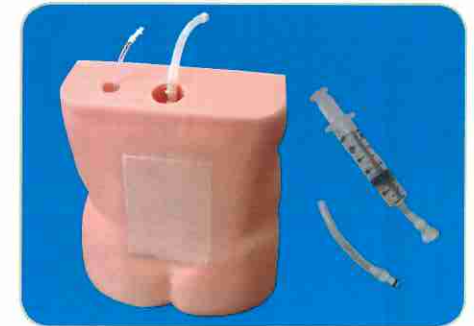


4. To prevent any additional fluid from entering the epidural space, make sure the spinal fluid tube is only slightly pressurized. Too much pressure will cause leaking in previous puncture points.

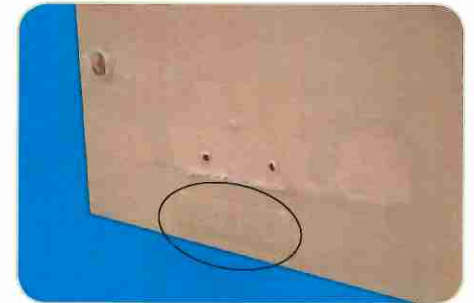


REPLACEABLE TISSUES

1. There are four different tissues available for the Lumbar Puncture / Epidural Trainer:
 - » Normal Adult (LPEN-10)
 - » Obese Adult (LPEO-10)
 - » Geriatric Adult (LPEG-10)
 - » Geriatric Obese Adult (LPEGO-10)



2. The various tissues can be identified by the part number located on the bottom of the tissue.



3. To replace a used tissue with a new one, begin by removing the old tissue. To do this, slide a hand in between the body form and the base of the tissue and pull it up and out.

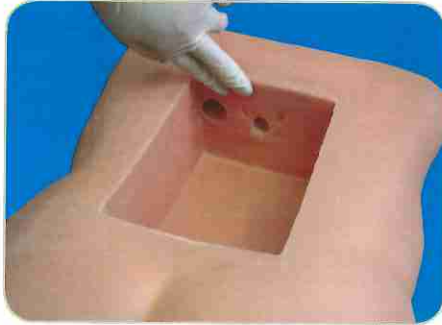


4. Be sure to insert the new tissue with the spinous process facing out and the base of the spine facing down into the body form.



REPLACEABLE TISSUES

5. There are two openings for the tubing at the top of the body form.



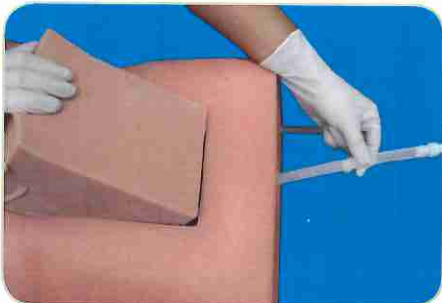
6. Guide the spinal fluid tube through the opening on the right.



7. Next, guide the epidural tube through the opening on the left.



8. Gently pull on both tubes to prevent kinking.

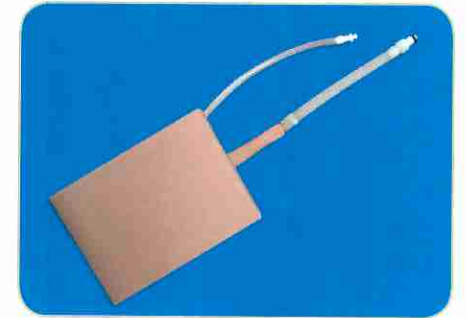


REPLACEABLE TISSUES

9. Press the tissue firmly down until it is flush with the body form.



10. To reorder replaceable tissues, visit www.simulab.com or contact Simulab's Customer Care Team at (206) 297-1260 or (866) 400-1260.



USING THE IV BAG (OPTIONAL)

1. Make sure the tissue's CSF line is full of fluid and that all the air bubbles are removed from the line.



2. After adding fluid to the IV Bag, the air needs to be removed from the line prior to connecting it to the trainer. To remove the air from the IV Bag's line, attach the Fill Line to the IV Bag.



3. Raise the IV Pole by unscrewing the knob at the bottom and pulling up.



4. To raise it further, twist the top counter-clockwise and pull up. With the IV Bag attached, adjust the flow regulator to release fluids.



USING THE IV BAG (OPTIONAL)

5. Once fluid starts entering the Fill Line, drain out the excess fluid and detach it.



6. Attach the IV Bag to the Lumbar Puncture / Epidural Trainer.



7. Insert a needle into the procedure site and adjust the flow regulator on the IV Bag line until fluid begins to flow from the needle.



8. Slowly adjust it to the desired drip rate.

