Anatomical Surgical Hand Scrub

(0:00 - 0:16)

This video is for training purposes only. Surgical site infections or SSIs remain a prevalent threat to patient safety. Proper surgical hand scrub or rub techniques are essential to decreasing its incidence.

(0:17 - 1:09)

This video provides instructions on anatomical surgical hand scrub procedure using the brush stroke method. If done correctly, this procedure should take three to five minutes. Before beginning the surgical hand scrub procedure, you must remove all jewellery from both hands and arms, inspect your skin and nails, ensure your skin is free of any cuts and wounds, nails must not extend past your fingertips, and nail polish must be intact without chips or scratches.

Remember, acrylics, artificial nails, and nails with foreign bodies are not allowed in the operating room. Put on your personal protective equipment. Make sure your hair and ears are tucked into your surgical head covering and that any neck jewellery is contained in your surgical attire scrubs.

(1:10 - 1:55)

Don proper eye protection and a surgical mask covering your nose, mouth, and if applicable, facial hair. To begin the scrub, tear open a sponge of your preferred hospital-approved antiseptic, either chlorhexidine or betadine, also known as povidone iodine. Place the open packet on the shelf above the sink with a tear facing the ceiling.

You must pre-wash your hands and arms only if this is the first case of the day or if your hands are visibly soiled. Use the soap from the dispensers located within the scrub sink or in a separate container above the sink. Then, use the disposable nail pick and clean under your fingernails under running water.

(1:56 - 2:59)

Dispose of the nail pick in the trash can beside the scrub sink and rinse hands and forearms. Once hands and arms have been washed, remove the sterile surgical sponge from its wrapper and moisten the sponge under running water by squeezing and releasing it. With fingertips together, use a light but firm pressure to stroke the nails in a back and forth motion with the abrasive brush side of the sponge approximately 30 times.

The abrasive brush side is only used on your fingertips. The non-abrasive side should be used for the remainder of the scrub. Next, turn the surgical sponge over to the non-abrasive side.

Place fingers side by side, including the thumb, and scrub the surface of the palm 10 strokes.

Then, turn the hand over and scrub the dorsal surface 10 strokes. Next, scrub the outside surface of the thumb from wrist to tip of the thumb 10 strokes.

(3:00 - 4:59)

Continue to apply 10 strokes to the other side of the thumb and to each side of your fingers. Once you scrub an area, do not go back. Now that you scrubbed your hand, it's time to scrub your arm on the same side.

Mentally divide the forearm into thirds from wrist up to two inches above the elbow. When scrubbing each third of your forearm, apply 10 strokes to the top, bottom, and both sides of each section. Like before, once you scrub an area, do not go back.

Repeat the scrub on the other hand and arm. Once both hands and arms are complete, discard the surgical sponge in the trash can beside the scrub sink. Start rinsing at your fingertips and continue to the hand, forearm, and elbow, moving in one forward direction through the water.

Always keep your elbow at a right angle and hand raised above the level of your elbow. Do not move arms back and forth in the water. If you need additional rinsing, completely remove your arm from the water stream and re-enter at the fingertips until you reach the elbow.

Once rinsing is complete and no antiseptic remains on the hand and arms, turn off the water with the knee control. To avoid contamination, keep hands above the level of the elbow and away from scrub attire and non-sterile surfaces. Allow residual water to drip off the elbows and into the sink.

Do not shake or wave hands and arms to remove excess water. Walk backwards through the operating room door and dry hands and arms with a sterile towel before donning a sterile surgical gown and gloves.