Surgical Hand Antisepsis / Hand Scrubs

PURPOSE:

General Hand Hygiene is a critical step in preventing nosocomial infections and cross contamination. General hand hygiene must occur immediately before and after patient contacting, after removing gloves, and anytime there is a possibility that there has been contact with blood or other potentially infectious materials.

The Surgical Hand Scrub also called surgical hand antisepsis is a process to remove or destroy transient microorganisms and reduce resident skin flora of the hands, nails and forearms. Surgical hand antisepsis is performed just prior to donning sterile attire.

POINTS OF EMPHASIS:

1. Rings, watches and bracelets are removed before beginning a surgical scrub.

2. Remove debris from under fingernails using a nail cleaner, soap and running water. Nails need to be worn short to facilitate cleaning and to prevent glove damage. Artificial nails and nail jewelry are never acceptable. Nail polish, if worn, cannot be chipped because chipped nail polish may support growth of microorganisms on the fingernails.

3. Hands are always held above elbow level following cleaning of the hands.

4. The surgical scrub is not to be interrupted. Non-sterile objects should not be touched. If this happens, the entire scrub procedure must be repeated.

SAFETY:

1. Persons with cuts, burns or open lesions on the hands or arms must not scrub for surgical procedures because broken skin increases bacterial count.

2. Care must be taken to prevent water splashes on the scrub suit or gown.

Surgical Hand Antisepsis Can be achieved One of Two Ways:

OPTION A:

Option A: Antiseptic hand rub with persistent activity (3M Avagard) (Chlorhexidine Gluconate 1% Solution and Ethyl Alcohol 61% w/w), (Surgicept) (70% ethyl alcohol concentration), or (Alcare) (62% Ethyl alcohol)
**ALCARE FOAM ANTISEPTIC SCRUB**

Prior to first Alcare Foam Antiseptic Surgical Scrub, an initial anatomical scrub must be done.

**Directions for use: Alcare**

1. Wash hands with antiseptic to 2” above elbows, clean under nails with a disposable nail cleaner, rinse and dry hands and arms.
2. First application of foam is about the size of a tennis ball. Collect in palm of both hands.
3. Distribute over both hands, arms, and wrists to just above the elbows, massaging until the foam is absorbed.
4. While arms are air drying, a second application about the size of a ping pong ball is used.
5. This application is used for hands and wrists only. Let the hands air dry then gown and glove

– Avagard Antiseptic Hand Prep

**Action – Avagard Antiseptic Hand Prep:** Avagard offers a combination of alcohol, which functions to rapidly reduce microbial counts on the skin, along with chlorhexadine gluconate which offers both persistence and an accumulative effort

DIRECTIONS FOR USE: Avagard

1. For the first use of the day, pre-wash hands and forearms with an antimicrobial soap and water. Clean under the fingernails* with a nail stick. Dry hands completely. *Fingernails only need to be cleaned once per day.
2. Dispense the pump (2ml) of Avagard Antiseptic Hand Prep into the palm of one hand. Dip the fingertips of the opposite hand into the hand prep and work it under the nails. Spread remaining Avagard Antiseptic Hand Prep evenly over the hand and up to just above the elbow, covering all services.
3. Pump another 2ml of Avagard Antiseptic Hand Prep, repeat the above procedure with the other hand.
4. Dispense another 2ml of Avagard Antiseptic Hand Prep into either hand and reapply to all aspects of both hands up to the wrist. Rub hand prep into hands (15-25 seconds) until hands are dry before donning gloves.

Surgicept

**Action – Surgicept:** Surgicept is a waterless surgical hand antiseptic that kills viruses in addition to fighting bacteria. The formulation includes 70% ethyl alcohol concentration as well as a patented preservative system.

DIRECTIONS FOR USE: Surgicept

1. For the first scrub of the day, clean under nails using a nail pick under running water.
2. Apply Surgicept to clean, dry hands.
3. Dispense a sufficient quantity of Surgicept to cover one hand (approximately 2ml) into cupped palm. Dip the fingertips of your opposite hand into Surgicept and work under the nails. Spread the remainder of the Surgicept on the hand and lower two-thirds of the forearm.
4. Dispense an additional sufficient quantity (approximately 2ml) of Surgicept and apply to all surfaces of the hands up to the wrists, paying particular attention to the nails, cuticles, and interdigital spaces.
5. Allow skin surfaces to dry before donning gloves. Do not dry with a towel
6. Following surgical case completion, remove gown and gloves.

7. Wash hands with soap, rinse with water and towel dry hands.
8. To prepare for scrubbing for the next surgical case, wash hands with soap and water, towel dry hands, and reapply Surgicept as described above.

FOLLOWING SURGICAL CASE COMPLETION:

Following removal of gown and gloves, personnel must wash their hands with soap, rinse with water, and towel dry their hands.

IN PREPARATION FOR SCRUBBING FOR THE NEXT SURGICAL CASE:

All personnel must first wash their hands with soap and water and then towel dry their hands. Following this, apply the "directions for use" above.

OPTION B:

Option B: Surgical Antisepsis using an Antimicrobial Soap:

PROCEDURE:

1. Turn on faucet and regulate water flow and temperature. Wet arms and hands under the running water.
2. Dispense a small amount of cleaning agent into palm of hands or use
3. Wash hands and arms, including 3" above the elbow.
4. Use nail file to clean under nails while holding fingers under running water.
6. Keep hands above elbow level and rinse hands and arms thoroughly.
7. Re-lather to 3" above elbows.
8. Obtain a sterile brush, wet it under running water and dispense a small amount of cleansing agent on the brush
9. EZ scrub brushes 205 or 107 are also available. (packaged with antimicrobial agent)
10. Scrub nails, fingers, hands and arms to 3" above the elbow.
   b. Skin areas – 10 strokes per side:
      i. Fingers – (each has 4 sides) scrub each side, including inter-digital spaces and webbed area between thumb and forefinger.
      ii. Palm and back of hand – divide palm and back of hand each into two halves (right and left). Scrub well over knuckles.
      iii. Mentally divide arm from wrist to elbow into three sections; starting at wrist, scrub 1st section of arm on all four sides. Proceed to next two sections and scrub in the same manner to 3" above the elbow and the antecubital space.
11. Rinse brush and transfer to other hand. Scrub the other hand and arm in the same manner.
12. When scrub is completed, drop the brush into the sink. Do not touch the brush once it has been dropped.
13. Keep hands above elbow level and rinse thoroughly under running water.
14. Turn off water.

15. Keep arms and hands over sink to allow excess water to run off. Don’t shake the water off.

16. Hold hands up in front and away from body and proceed to gowning area.

FOLLOWING SURGICAL CASE COMPLETION:
Following removal of gown and gloves, personnel must wash their hands with soap, rinse with water, and towel dry their hands.

IN PREPARATION FOR SCRUBBING FOR THE NEXT SURGICAL CASE:
All personnel must first wash their hands with soap and water and then towel dry their hands. Following this, apply the "directions for use" above. Use the same soap throughout the day.

All personnel: Circulating nurses, anesthesia personnel, and CSTs who do not assist directly at the surgical field must wash their hands with soap and water and towel dry after each task. (Five moments of hand hygiene)

Non-sterile Gloves are provided for handling contaminated items, secretions, and body fluids. These gloves are also used when handling patients with open wounds, drains, skin irritations, and infections. Non-sterile gloves are also worn when cleaning surfaces. These gloves are then removed and a general hand wash must be performed.

The following is available for surgical hand asepsis:

1. Avagard 3M hand rub (chlorhexidine gluconate 1% and Ethyl Alcohol 61%) (Option A) offers fast acting broad spectrum antimicrobial action with persistence and cumulative activity. Note: for the first use of the day, pre-wash hands and forearms with an antimicrobial soap and water. Clean under the fingernails with a nail stick. Dry hands completely.

2. E-Z Scrub 205 Providone-Iodine (13%) (Option B) bactericidal action with persistence.

3. E-Z Scrub 107 – Hibiclens 4% Chlorhexidine gluconate w/v antiseptic (Option B) bactericidal with persistence and cumulative activity

4. Steris Alcare foamed antiseptic hand rub (62% v/v ethyl alcohol) offers fast acting, broad-spectrum antimicrobial action.

5. Surgicept contains alcohol and some Chlorhexidine.

GENERAL HAND HYGIENE:
General hand hygiene is to be performed before and after patient contact, after removing gloves and any time there is a possibility that there has been contact with blood or other potentially infectious materials, before and after eating, and after using the restroom.

At the sinks for general hand washing between cases, there is:

1. Bactoshield CHG 4% surgical scrub - antimicrobial

2. Skintegrity – triclosan 0.5% – antimicrobial soap

PROPER GENERAL HAND HYGIENE PROCEDURE:

1. Wet hands with warm water
2. Apply soap to hands
3. Rub hands together vigorously for at least 15 seconds. Cover all surfaces of the hands and fingers.
4. Rinse hands with warm water and dry thoroughly with a disposable towel.
5. Use a towel to turn off the faucet when not an automatic turn off.

Cavilon 3M CHG Compatible moisturizing lotion is supplied in the OR. This product is latex glove compatible and hypoallergenic. It contains emollients for moisturizing or preventing dry skin. It does not affect the activity of chlorhexidine gluconate. Other lotions are not to be used unless approved by infection control.

References:

2. Avagard 3M Procedural use

Attachments: No Attachments

Approval Signatures

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