

Safe Use of Gels for Ultrasound

Purpose: To minimize the risk of infection due to use of ultrasound gels in the vascular laboratory or in Southern Vein Care.

Audience: All healthcare workers in the Southern Vein Care clinic and vascular lab.

Policy:

Use of Sterile Ultrasound Gel

- Use of sterile ultrasound gel as recommended in clinical practice standards for all sterile body site procedures and any invasive procedures using ultrasound-guided biopsy or ultrasound-guided device insertion (1-5).
- Use sterile ultrasound gel for procedures with mucosal contact where biopsy is not planned but any possible added bio burden would be undesirable or mucosal trauma is likely (e.g., transesophageal echocardiography [TEE] procedures, transvaginal ultrasound procedures without biopsy and transrectal ultrasound procedures without biopsy). (1, 6-8)
- Use sterile ultrasound gel for all procedures on Pediatric patients including neonatal patients. (1, 9, 10)

Use of Non-Sterile Ultrasound Gel

- Use open containers of ultrasound gel only for low risk procedures on intact skin and for low risk patients.
- For non-sterile ultrasound gel, single use containers are recommended rather than refillable multi-dose bottles.
- If single use containers are not used, the following guidelines must be followed for reusable bottles
 - Prior to refilling reusable bottles, ensure that the large bulk container of ultrasound gel has not passed the expiration date.
 - Prior to refilling, bottles must be emptied and dried. Caked gel must be thoroughly removed from the neck of the bottle and inside the bottle lid.
 - Bottles must then be washed in hot soapy water and thoroughly rinsed. Only completely intact bottles may be reused.
 - When in use, bottles must not be “topped off”. They must be used until empty and then reprocessed prior to refilling.
 - Bottles must be filled using a dispensing device that has been attached to the large bulk container and not by inserting the tip of the reusable bottle into the large bulk container to aspirate the contents.

– When refilling the bottle, do not touch the opening of either container with your hands or allow your hands to touch other

environmental surfaces. Maintain aseptic technique during the refilling process.

– Bottles must be refilled as close as possible to the time of use.

– Expiration dates on bulk containers need to be carefully monitored and containers discarded by the expiration date.

– Gel dispensed into a refillable bottle will expire in 30 days. The date of expiration must be written on the bottle at the time it is refilled.

– Bottles of ultrasound gel must also have a discard date written on them when they are first opened. The discard date is 30 days from when the bottle was opened.

– Unused gel in a bottle or a refillable bottle must be discarded at the end of 30 days or by the manufacturer's expiration date, whichever comes first.

– Dispensing nozzles must not come into direct contact with patients, staff, instrumentation or the environment. Dispense the ultrasound gel from the bottle into a cup or onto a disposable cloth; if this is not possible, wipe the dispensing nozzle with a clean alcohol swab between patients. Wipe the outside of the ultrasound gel bottle with a Cavicide wipe between patients.

– For patients on isolation precautions, use a single dose packet of ultrasound gel to prevent contamination of a bottle of gel.

– Warming ultrasound gels

○ Warm ultrasound gel only when needed

○ Bottles should be removed from the warmer as soon as possible and dried immediately. Do not store the ultrasound gel bottles in the warmer throughout the day.

○ Gel warmers must be cleaned weekly according to manufacturer's instructions for use with a low-level hospital grade disinfectant. If the warmer becomes soiled, it should be cleaned immediately with low-level hospital grade disinfectant.

– Storage of ultrasound gel

○ Bulk bottles and prefilled bottles of ultrasound gel should be stored in an area that is dry and protected from potential sources of contamination such as dust, moisture, insects and rodents.

○ If evidence of potential contamination is present, or if the package integrity has been breached, the ultrasound gel must be discarded immediately (11-14).

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