

Medical gels and the risk of serious infection

Reason for posting: Gels are routinely used in a variety of physical examination and diagnostic medical procedures including ultrasonography and endoscopy. Health Canada, however, has recently warned that several common practices involving the gels may lead to infection.¹ These practices include warming the gels in uncapped containers for extended periods of time, not cleaning refillable squeeze bottles, and using nonsterile gels marked for external use only during invasive procedures (such as biopsies) or on mucous membranes. Although no cases of infection linked to these practices are reported in the Health Canada letter, several cases exist in the medical literature of nosocomial infections traced back to contaminated ultrasound gels.²⁻⁴

What to do: Health Canada has issued recommendations for minimizing the health risks of using gels (see Box 1). In combination with the use of disposable barriers (such as a surgical glove, condom, household cling film or sterile "Opsite" films)[†] placed on nonsterile ultrasound probes, these recommendations appear to represent common sense infection control precautions that are easy to implement in both hospital and community settings.

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Box 1: Recommended practices for minimizing the risk of serious infection from ultrasound and medical gels*

Sterile gels should be used:

- for invasive procedures that pass a device through a tissue (e.g., needle biopsies)
- for all procedures involving sterile equipment or non-intact skin
- on neonates
- for procedures on intact mucous membranes (e.g., esophageal, gastric, rectal, vaginal)

Nonsterile gels:

- single-use containers should be used
- if using refillable containers, they should not be "topped up" but must be emptied, washed in hot soapy water with hospital grade disinfectant, rinsed thoroughly and dried before refilling
- cracked reusable containers should be discarded
- expiration dates on bulk containers need to be carefully monitored
- gels should not be aspirated from the bulk gel containers (which can contaminate the bulk container) but dispensed from bulk containers into reusable containers
- tips of dispensing containers should not come into contact with patients, staff, instruments or the environment (dispense the gel into a cup or onto a disposable cloth, or at least wipe the dispensing nozzle with a clean alcohol swab between patients)

Warming the gel:

- warm the gel only when it is needed
- remove bottles from the warmer as soon as possible and dry them immediately
- clean the warmers weekly with a low-level hospital grade disinfectant

*Adapted and abbreviated from reference 1.

References

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