ASA CLINICAL STATEMENT | THE SAFE USE AND STORAGE OF ULTRASOUND GEL

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The ASA endorses the Australasian Society for Ultrasound in Medicine (ASUM) and the Australasian College for Infection Prevention and Control (ACIPC) *Guidelines for Reprocessing Ultrasound Transducers*, which was published in 2017. The guideline was developed due to risk of pathogen transmission and subsequent infection from ultrasound examinations.[1] The safe use and storage of ultrasound gel can minimise the risk for microbial growth of microorganisms in gel and the potential for subsequent infection of patients.

The ASA recommends that this guideline be used as a basic foundation for workplace protocols to be developed. The aim of this guideline is to minimise the potential risk of transmitting infection due to the use of contaminated ultrasound gel. All ultrasound equipment in direct or indirect patient contact should be thoroughly cleaned and disinfected prior to every examination.[2] The use of sterile or non-sterile ultrasound gel depends on the type of examination.

Non-sterile gel

The use of non-sterile gel should be limited to low-risk general examinations on intact skin. Multidose bottles may be used in these circumstances. These gel bottles must be discarded when empty and should not be refilled as they pose a higher risk of contamination when refilled.[3] The bottle should be sealed when not in use and direct contact with the gel bottle dispensing tip and any person or transducer should be avoided.[3] The previous practice of refilling bottles from a 5-litre reservoir is no longer recommended.

Sterile gel

Sterile, single-use gel is preferred when infection is a concern. Sterile gel should be used for all critical procedures, such as invasive examinations that pass a device through tissue, and for all procedures that may involve contact with non-intact skin, open wounds or contact with mucous membranes.[2,4] Sterile gels are TGA approved, and clearly marked as 'sterile', and supplied in unopened ultrasound gel packets or sachets that are specifically labelled as single-use only.[3] Any unused portion of single-use sterile gel packets must be discarded and not reused for another examination or patient.[5] It is recommended that single-use bottles should be used for patients with transmission-based precautions to prevent spread of infection.[1]

Gel warming

Heating of ultrasound gel is not recommended due to the risk of bacterial contamination and growth.[6,7] However, in circumstances where warm gel is necessary, the use of dry heat is the preferred method.[1,2,7] Gel warmers should be cleaned and disinfected regularly in accordance with manufacturer's recommendations.[1] The 28-day discarding advice should be strictly adhered to for gel bottles inserted into warmers.

Storage

Ultrasound gel should be stored in areas that are dry and protected from potential sources of contamination, such as dust, moisture, insects, rodents.[7] Gel bottles should clearly be labelled with date of expiry and should be wiped with an appropriate disinfectant wipe after each use.[7]

References

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