



The Need for Sterile Ultrasound Probe Covers During Injection (Invasive) Procedures

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Physician utilization of ultrasound to identify anatomical structures in order to properly place needles has gained increasing acceptance during the past decade. As a manufacturer of sterile ultrasound probe covers, Safersonic increasingly encounters physicians who utilize no probe covers at all or unauthorized materials as probe covers. In this document we address both issues.

Physicians agree that injections are invasive procedures. When performing these procedures physicians follow Universal Precautions and Aseptic Techniques. For example a sterile single use disposable syringe with needle is utilized and the patient's skin is prepped with an antiseptic agent.

With the utilization of ultrasound to locate anatomical structures, no one would argue that the ultrasound probe should be cleaned and sterilized prior to skin contact utilization since the probe will be near the invasive puncture site. However, the ultrasound probe is a delicate instrument, easily damaged by most sterilization processes. The equipment manuals from a number of major ultrasound manufacturers validate this fact. Furthermore, from an Infection Prevention viewpoint, a wipe or a spray with a disinfectant solution is not sterilization and therefore does not comply with Aseptic Techniques.

CONCLUSION: Ultrasound equipment manufacturers recommend the utilization of sterile disposable covers to ensure compliance with Universal Precautions, Aseptic Techniques and to prevent damage to the ultrasound probe!

Many physicians use an adhesive backed semi-occlusive dressing to cover the ultrasound probe. While the dressing is supplied sterile, the issues with this course of action are as follows:

- This is considered an “off-label” application of this dressing with liability implications for the physician and the facility.
- The porosity of the semi-occlusive dressing allows the migration of microorganisms from the ultrasound probe cover through the dressing. These microorganisms could result in infection including necrotizing fasciitis at the injection site,
- Adhesives designed to secure a dressing to the skin may damage the crystal alignment in the ultrasound probe upon removal.

CONCLUSION: Utilization of a sterile disposable probe cover ensures compliance with Universal Precautions, Aseptic Techniques, prevention of damage to the ultrasound probe, and utilization of a product for its intended use.