
Real-World Strategies for Improving Patient Safety During Ultrasound-Guided PIV Insertions



At AVA 2023, experts share how a unique sterile dressing enables better aseptic technique for UGPIV placement

The [UltraDrape®](#) Barrier and Securement Dressing can improve both patient safety and clinical efficiency during ultrasound-guided peripheral IV insertions, according to Nancy Moureau, RN, PhD, an internationally recognized expert in vascular access and CEO of [PICC Excellence](#).

Dr. Moureau and James Thomas, RN, CPEN, a pediatric emergency nurse at a Colorado hospital, shared their real-world experiences with the unique sterile dressing in an exhibitor-sponsored Vascular Access Talk at the recent Annual Scientific Meeting of the [Association for Vascular Access](#), held October 14-17, 2023 in Portland, Ore.

According to Moureau, the UltraDrape dressing provides a way to standardize UGPIV procedures and improve aseptic technique by providing sterile probe protection and separating ultrasound gel from the sterile insertion site.

"As clinicians, we all want to protect our patients. For vascular access, ultrasound has proven to be an incredibly valuable visualization tool that facilitates reduction in the number of failed insertion attempts and helps to preserve patient vessels," said Moureau. "But protecting our patients also means adhering to proper aseptic technique and applying recommendations for appropriate disinfection practices and adequate probe protection."

Real-World Experience with UltraDrape

After Moureau told the story of the development of the innovative dressing and best practices for its adoption and use, Thomas shared his experience with the successful implementation of UltraDrape in a Level I trauma center at a children's hospital.

His hospital began using ultrasound for IV placements after learning children at their facility would typically undergo a minimum of 10 insertion attempts before clinicians could achieve successful IV placement, which was "simply unacceptable" to Thomas. However, he was concerned the presence of the ultrasound probe and gel at the sterile insertion site posed an infection risk.

When Thomas was first introduced to UltraDrape, he felt it would eliminate many of his concerns. The transparent barrier dressing made it easier to maintain asepsis during UGPIV procedures and provided the necessary probe protection by separating both the ultrasound probe and gel from the insertion site. The ultrasound gel is applied to a disposable film layer instead of the patient's skin, resulting in a safer, gel-free insertion. This also eliminated the time-consuming post-procedure clean-up and reduced the risk of inadequate gel removal leading to dressing failure.

"UltraDrape is amazing – it's fast, user-friendly and provides a clear barrier between the ultrasound gel and the insertion site so that we never even come close to contaminating the IV the way we could with our usual technique," said Thomas. "Plus, the dressing is secured in place, which decreases the chances of the IV being dislodged – a significant benefit when working with a pediatric population."

UltraDrape II - The Next Generation of UGPIV Barrier & Securement

In their talk, Moureau and Thomas also highlighted the importance of collaboration between clinicians and device manufacturers to create products that solve real-world problems. Thomas and his team felt a smaller UltraDrape would better fit the needs of their pediatric patients. They worked with [Parker Laboratories](#) to create a newer, smaller design that would work well with children, and would provide a better window for post insertion assessment.

This input eventually led to the development of the [UltraDrape II](#), which Parker Laboratories debuted at the recent AVA meeting. Like the original, UltraDrape II is a sterile, dual-action barrier and securement dressing that provides a “gel-free” insertion site to decrease the risk of contamination and securement failure both during and after UGPIV procedures.

In addition to a smaller size that allows for use on a broader patient population, UltraDrape II was designed to offer several additional advantages, including:

- **Easier to Use** - New FlexTab™ improves “standability,” creating a secure barrier between the ultrasound transducer and the skin. The quick-release film allows for immediate and residue-free gel removal.
- **Improved Visualization** - Features a borderless end for ease of scanning in both long and short axis and allows imaging beyond the dressing.

“The UltraDrape minimizes risk, especially in the pediatric population that is not agreeable to sit still. It creates not just a barrier to keep gel out of the insertion site, but it also provides securement once the IV is placed,” said Jenn Hilliard, a pediatric emergency room nurse at the same hospital as Thomas. “It really does work beautifully, and the fact that we’re going to have the UltraDrape II makes me so excited.”

UltraDrape II will be available for purchase in December 2023.

About Dr. Nancy Moureau and PICC Excellence

Nancy Moureau, RN, PhD, CRNI, CPUI, VA-BC, is the owner and president of PICC Excellence, a vascular access education and training service for clinicians. She is a member of the Alliance for Vascular Access Teaching and Research Group (AVATAR) based in Australia.

Recognized as an international expert in vascular access education and training, she is widely published in the [medical literature](#), including recent [guidelines](#) that defined appropriate indications for insertion, maintenance, and care of PICCs. PICC Excellence provides effective, easy-to-understand in-person and web-based education and training for clinicians worldwide.

Source: [Parker Laboratories](#)

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