RECOMMENDATION: 
ROLE OF QUALIFIED SONOGRAPHERS IN CEUS

RECOMMENDATION

The International Contrast Ultrasound Society (ICUS) strongly recommends the adoption of scope of practice policies and procedures that permit qualified Diagnostic Medical or Cardiac Sonographers to gain peripheral venous access and administer ultrasound contrast agents (UCAs), also known as ultrasound enhancement agents, when medically indicated.

BACKGROUND - CEUS

Contrast enhanced ultrasound (CEUS) is an exciting medical imaging technique that uses ultrasound waves to produce exquisite images of tumors and organ blood vessels. In addition, CEUS provides high resolution images of the cardiovascular system that can dramatically improve the detection of cardiac abnormalities and stratify risk of heart attack or stroke.

This very safe procedure is performed without any ionizing radiation and often allows for diagnoses that otherwise would require the use of a CT or MR scan. In addition, like conventional ultrasound examinations, CEUS is easily accessible in a variety of clinical settings, is less expensive than comparable imaging techniques, and provides real time diagnostic information that can speed access to appropriate therapy. Studies and extensive clinical experience alike show that CEUS can help avoid unnecessary downstream tests, lower overall health care costs, change patient outcomes, and save lives.

A CEUS examination requires the injection of a UCA into a peripheral vein in the patient's arm during an ultrasound scan. This differs from non-CEUS ultrasound examinations, which do not require intravenous access or UCA administration.

UCAs are comprised of liquid suspensions of biocompatible, microscopic gas-filled microspheres (sometimes called “microbubbles”) that flow through the body's microcirculation without impediment, and are metabolized and expelled from the body within minutes. UCAs are now integral components of ultrasound imaging throughout
the world, and are approved for use in adult and pediatric imaging by the US Food and Drug Administration, the European Medicines Agency, and their counterparts in Asia, the Americas and elsewhere.

**KEY ISSUE - ROLE OF SONOGRAPHERS**

In many medical centers around the world, UCAs are safely and routinely administered by a qualified Diagnostic Medical or Cardiac Sonographer -- a professional who is qualified by credentialing and academic and clinical experience to provide diagnostic patient care services using ultrasound and related diagnostic procedures.

Nonetheless, primarily in the USA, some medical centers insist that a registered nurse be called to gain venous access and to administer a UCA even when available sonographers have the appropriate education, certifications, clinical experience, and demonstrated competency. At those centers, when nurses are not available, patients are effectively denied access to medically indicated CEUS. This can negatively impact patient care and outcomes, and if further testing is ordered patients may incur unnecessary additional costs, delays, and exposure to ionizing radiation.

**CONCLUSION**

For the above reasons ICUS strongly supports scope of practice policies and procedures that permit qualified Diagnostic Medical or Cardiac Sonographers to gain peripheral venous access and administer UCAs when medically indicated.

**ABOUT ICUS**

The International Contrast Ultrasound Society is a nonprofit medical professional society that focuses on the appropriate use of contrast enhanced ultrasound (CEUS) to improve patient care and outcomes. Members of ICUS include health care professionals, their patients, and interested members of the public in 60 countries. For more information about ICUS, please visit [www.ICUS-SOCIETY.com](http://www.ICUS-SOCIETY.com).