Two venous punctures not always needed for intravascular ultrasound-guided

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One venous puncture, rather than two, is a safe and effective approach to intravascular ultrasound-guided inferior vena cava filter placement in critically-ill patients, a new study shows. Inferior vena cava filter placement is done to prevent or treat pulmonary emboli or deep venous thrombosis.

"The majority of institutions use a dual venous puncture technique, while we use a single venous puncture technique," said Dr. Andrew Gunn, of Massachusetts General Hospital in Boston. "We were interested to know if the different approaches affected technical success, clinical success or the rate of complications with the procedure," Dr. Gunn said.

In a study of 99 patients, the single puncture technique was technically successful in almost 94% of cases, which is comparable to the dual puncture approach, said Dr. Gunn. The rate for deep venous thrombosis at the venous access site was 2%. This compares to approximately 4% with the double puncture approach, he said.

Dr. Gunn noted that contrast venography is the most common method employed for guiding inferior vena cava filter placement; however, intravascular ultrasound-guided placement is particularly useful in treating critically ill patients, patients who have contrast allergies as well as those who have compromised renal function.

"Intravascular ultrasound-guided placement can be done at the patient's bedside, eliminating the need for time-consuming and often difficult

patient transport," he said. About 41% of the inferior vena cava filter placements were done at the bedside. "The filter was slightly more likely to be malpositioned if the procedure was done at the patient's bedside," Dr. Gunn added.

Dr. Gunn will present his study at the ARRS annual meeting on April 19 in Washington, DC.

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