## Extended Field of View Ultrasound in the Evaluation of Peripheral Aneurysms

Carlos Engelhorn, MD, Nicolau Dabul Jr., MD, Ana Engelhorn, MD, Sergio Salles-Cunha, PhD RVT, Catholic University of Curitiba

INTRODUCTION: Arteriography often fails to demonstrate open arteries distal to thrombosed popliteal aneurysms. Standard ultrasound has the disadvantage of a small field of view. We evaluated the long images provided by the extended field of view ultrasound technique.

METHODS: Six patients with 11 peripheral aneurysms were evaluated. The long longitudinal image was obtained with free-hand, real-time scanning. B-mode and Power Doppler images were obtained. There were eight popliteal artery aneurysms, two superficial femoral artery aneurysms and one deep femoral artery aneurysm. Nine aneurysms in four patients also were imaged with arteriography.

RESULTS: All aneurysms were properly imaged with extended field of view ultrasound. Comparison to arteriography revealed that this ultrasound technique provided additional and more complete information, not only about clot information, but also about patent arteries not clearly delineated by arteriography.

CONCLUSIONS: Extended field of view ultrasound is a promising technique in the pre-operative evaluation of femoropopliteal aneurysms. It provided more complete information than arteriography or standard ultasonography with a readily interpretable image.