

UNDERSTANDING AND INTERPRETING SPECTRAL WAVEFORMS IN THE UPPER AND LOWER EXTREMITIES, PART 1

A 21 year old female presents to her primary care physician for an enlarging right arm mass. Her past medical history is significant for trauma to her right upper arm while playing field hockey 8 weeks prior. Her physical examination is significant for a pulsating mass in the right upper arm. The remainder of the physical exam is unremarkable.

The patient was asked to undergo a right upper extremity ultrasound.

Images of her right upper extremity ultrasound are as follows:

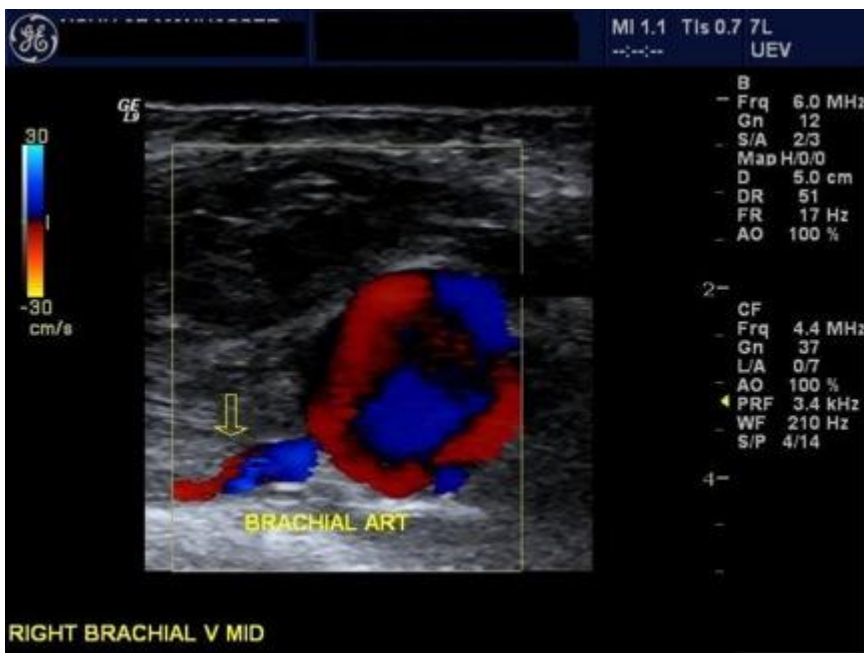


FIGURE 1: Color Doppler image of Right Brachial Artery

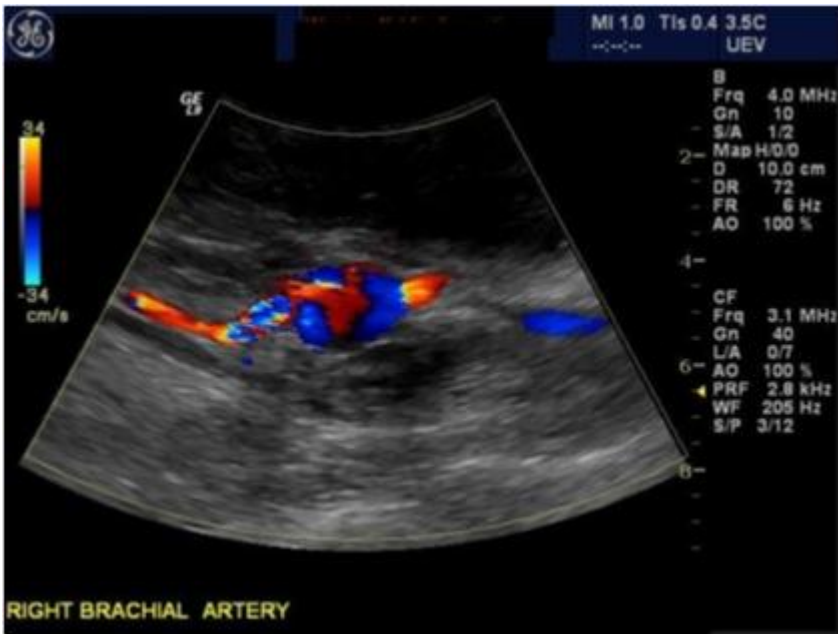


FIGURE 2: Color Doppler image of Right Brachial Artery

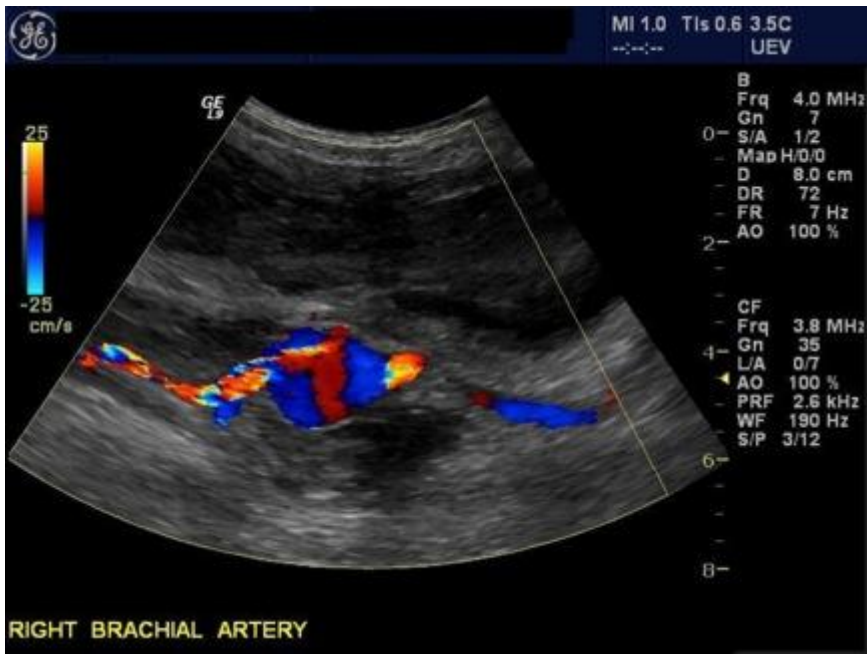


FIGURE 3: Color Doppler image of Right Brachial Artery

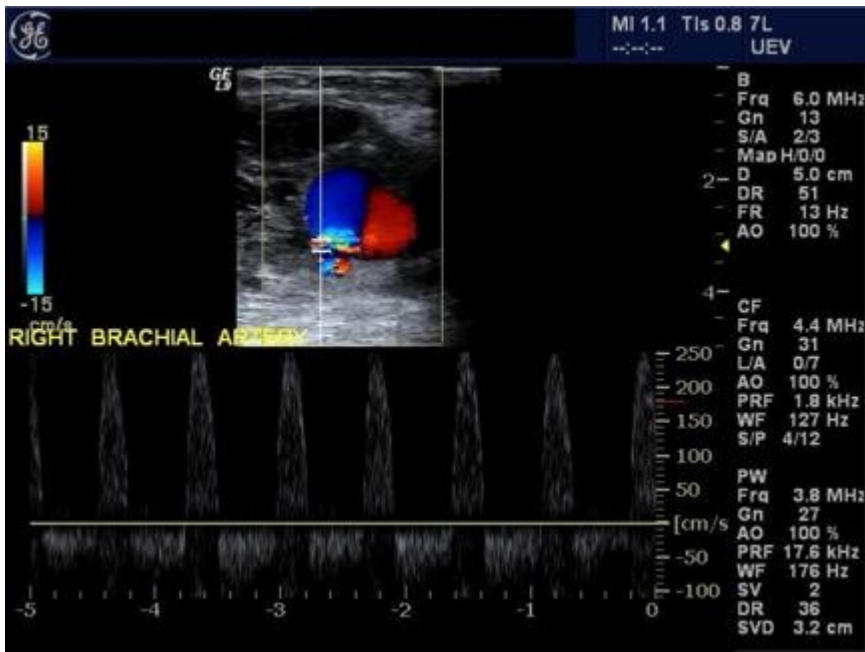


FIGURE 4: Color and Spectral Doppler image of Right Brachial Artery

Click below to take the self evaluation quiz for this case. After successfully passing the quiz you can view explanatory notes about the choices as well as references for further reading before proceeding to the next case.

A 68 year old female presents to her primary care physician for right leg claudication . Her past medical history is significant for hypercholesterolemia. Her physical examination is significant for decreased pulses in the right lower extremity.

The patient was asked to undergo a right lower extremity ultrasound.

Images of her right lower extremity ultrasound are as follows:



FIGURE 1: Color Doppler image of the proximal right superficial femoral artery

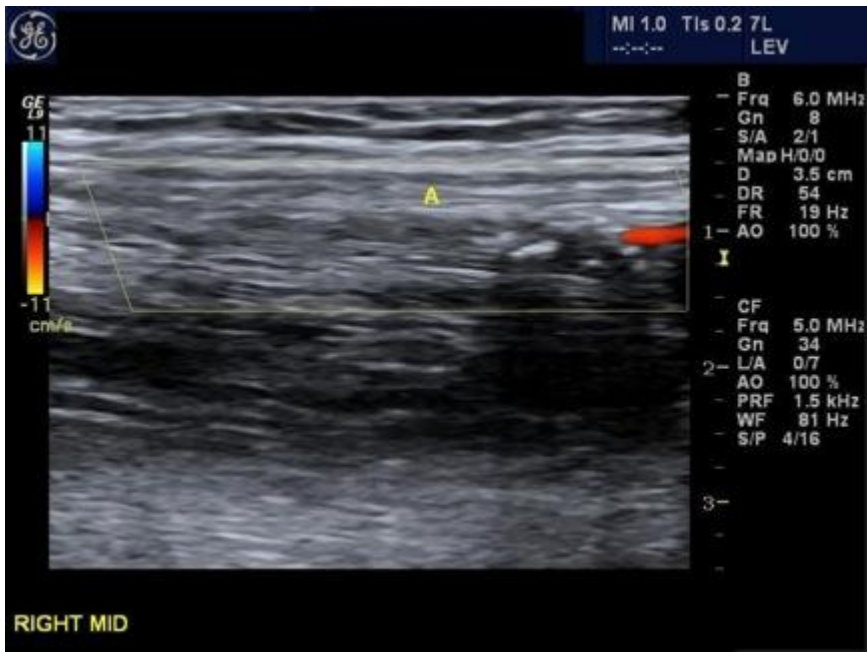


FIGURE 2: Color Doppler image of the mid right superficial femoral artery



FIGURE 3: Color and Spectral Doppler image of the mid right superficial femoral artery

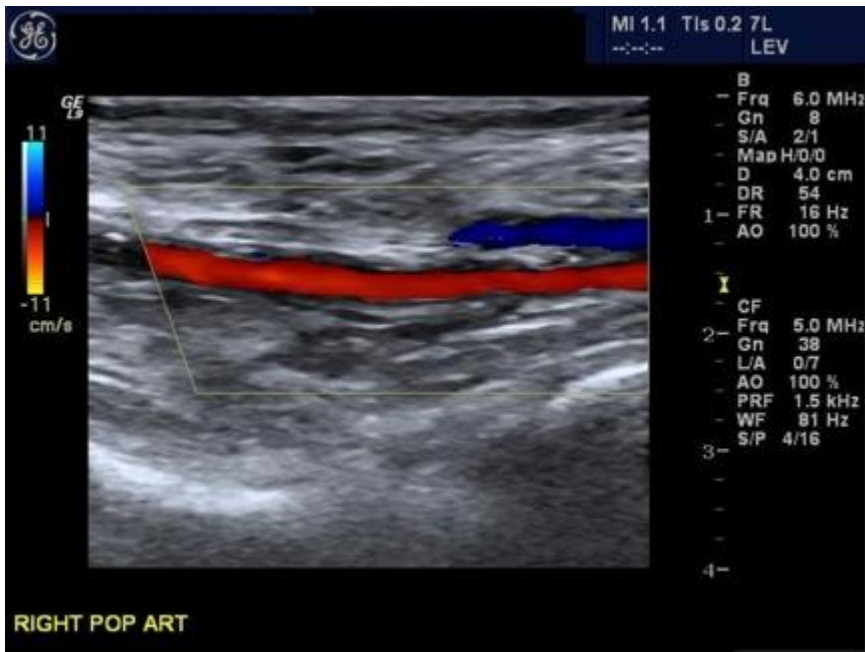


FIGURE 4: Color Doppler image of the right popliteal artery

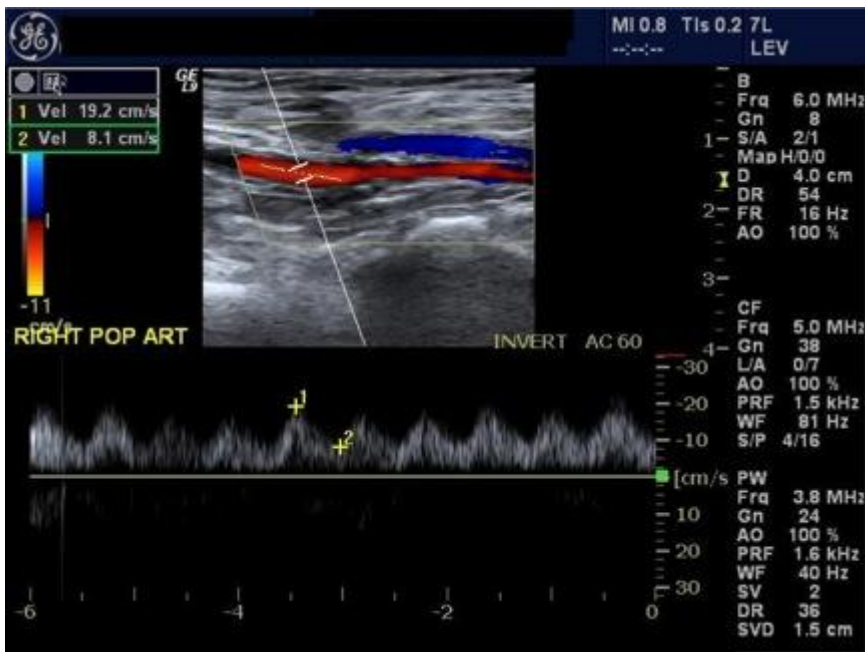


FIGURE 5: Color and Spectral Doppler image of the right popliteal artery

Click below to take the self evaluation quiz for this case. After successfully passing the quiz you can view explanatory notes about the choices as well as references for further reading before proceeding to the next case.

A 22 year old male presents to his primary care physician for sharp pain in his right hand and forearm. He has no significant past medical history. His physical examination is significant for 3/5 strength in his right distal upper extremity.

The patient was asked to undergo a right upper extremity ultrasound.

Images of his right upper extremity ultrasound are as follows:

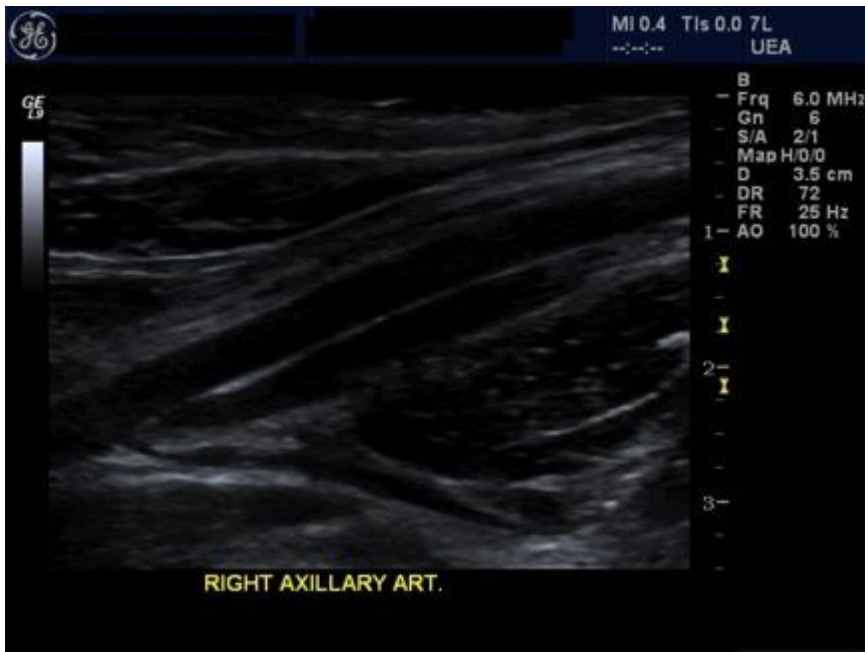


FIGURE 1: Ultrasound image of the right axillary artery

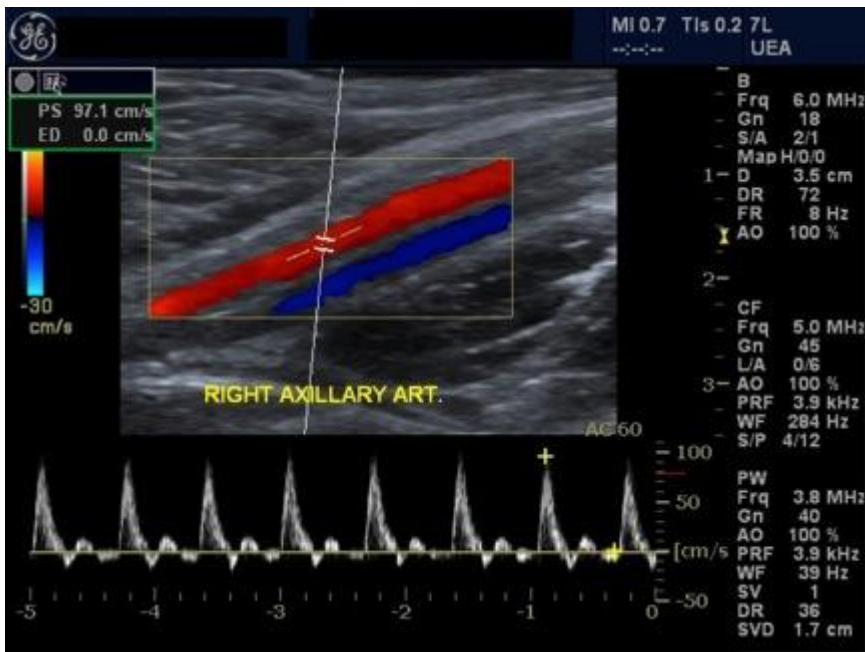


FIGURE 2: Color and Spectral Doppler image of the right axillary artery

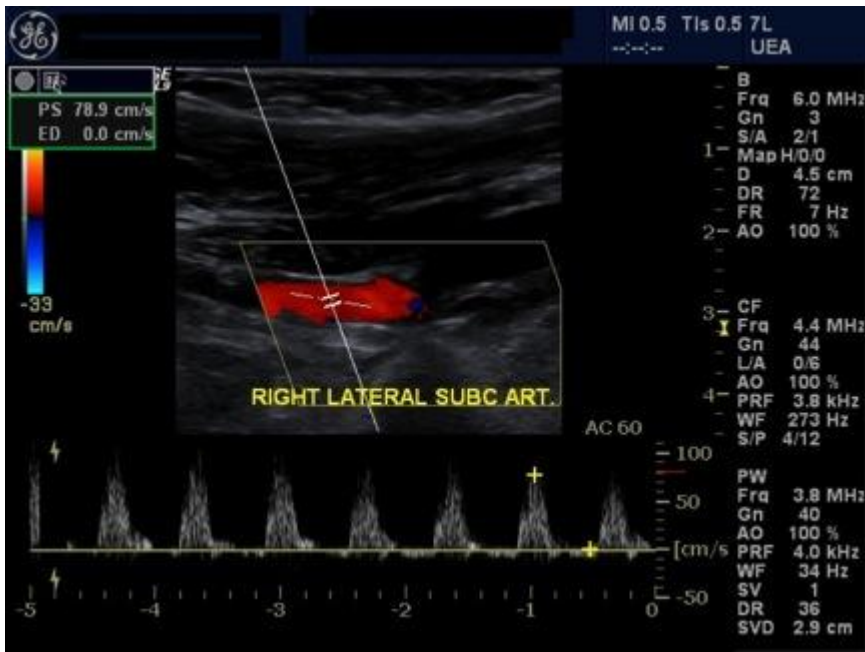


FIGURE 3: Color and Spectral Doppler image of the lateral right subclavian artery

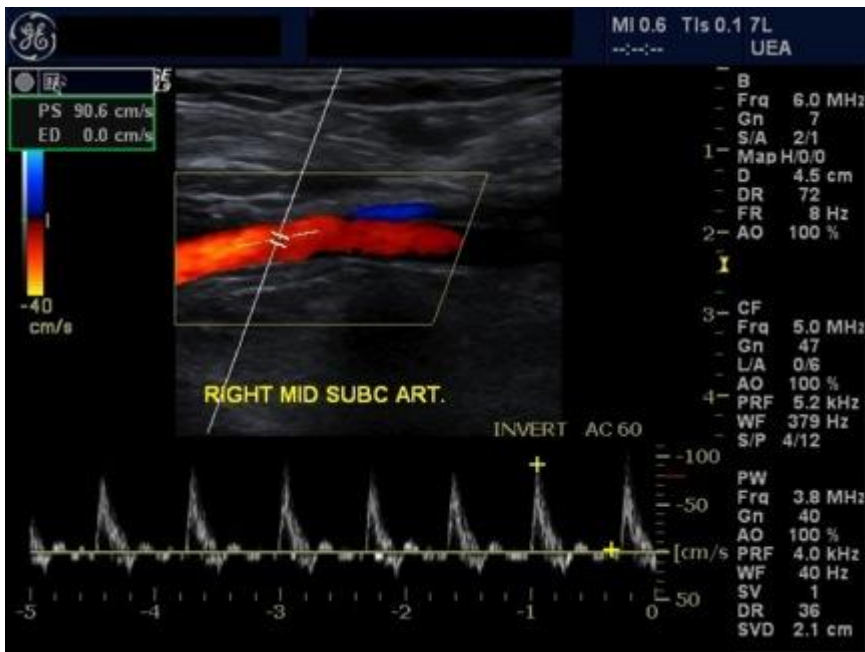


FIGURE 4: Color and Spectral Doppler image of the mid right subclavian artery

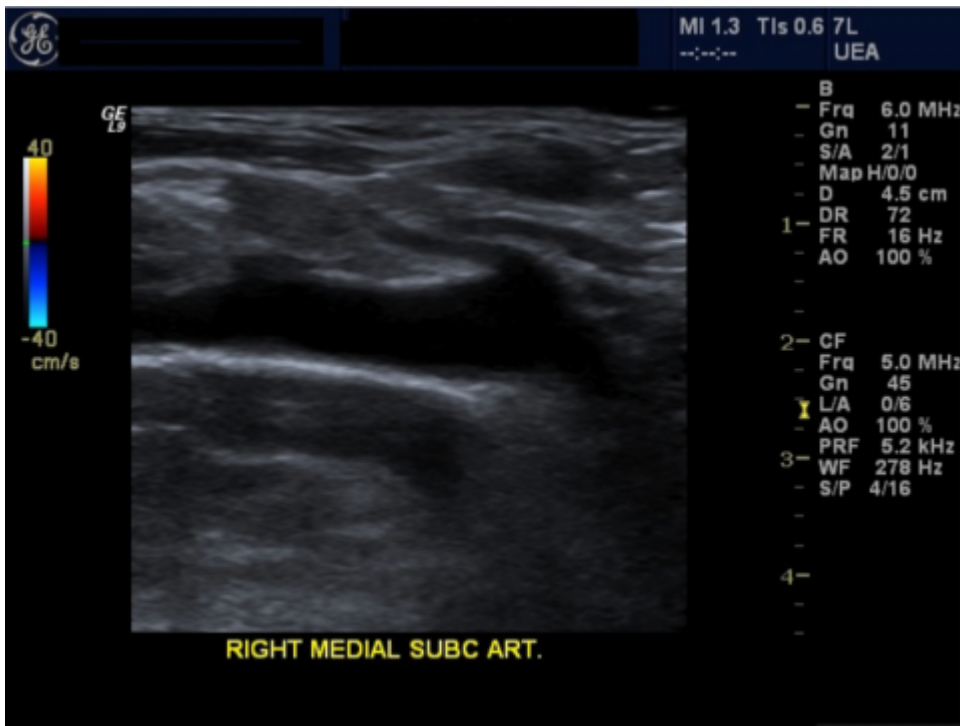


FIGURE 5: Ultrasound image of the medial right subclavian artery



FIGURE 6: Color Doppler image of the medial right subclavian artery

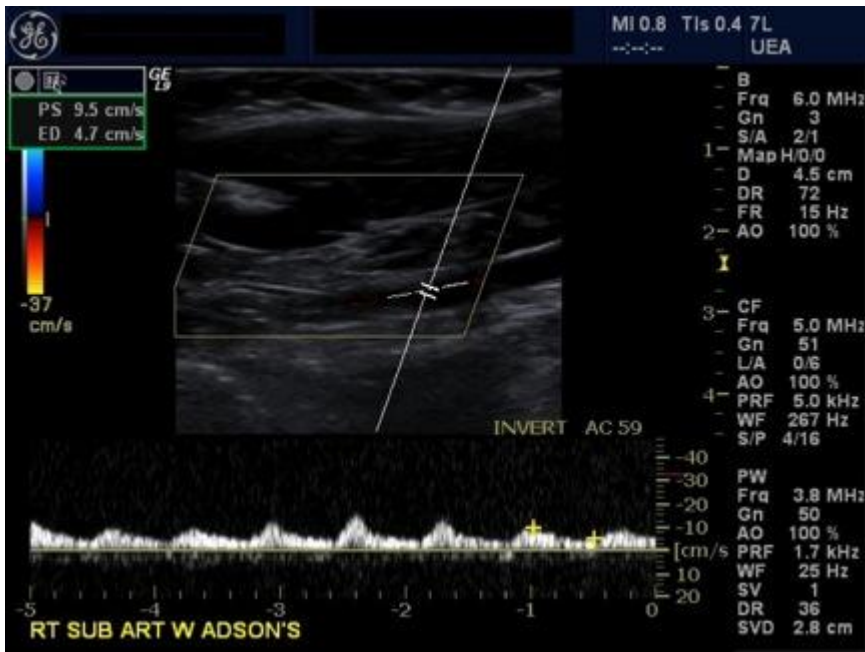


FIGURE 7: Spectral Doppler image of the medial right subclavian artery with Adson's maneuver

Click below to take the self evaluation quiz for this case. After successfully passing the quiz you can view explanatory notes about the choices as well as references for further reading before proceeding to the next case.

A 72 year old male presents to his primary care physician for right leg claudication and pain. His past medical history is significant for bilateral femoral to popliteal artery bypass grafts for high grade stenosis of the superficial femoral arteries due to atherosclerotic disease. Her physical examination is significant for decreased right lower extremity pulses.

The patient was asked to undergo a bilateral lower extremity ultrasound to assess for patency of her bypass grafts.

Images of her lower extremity ultrasound are as follows:

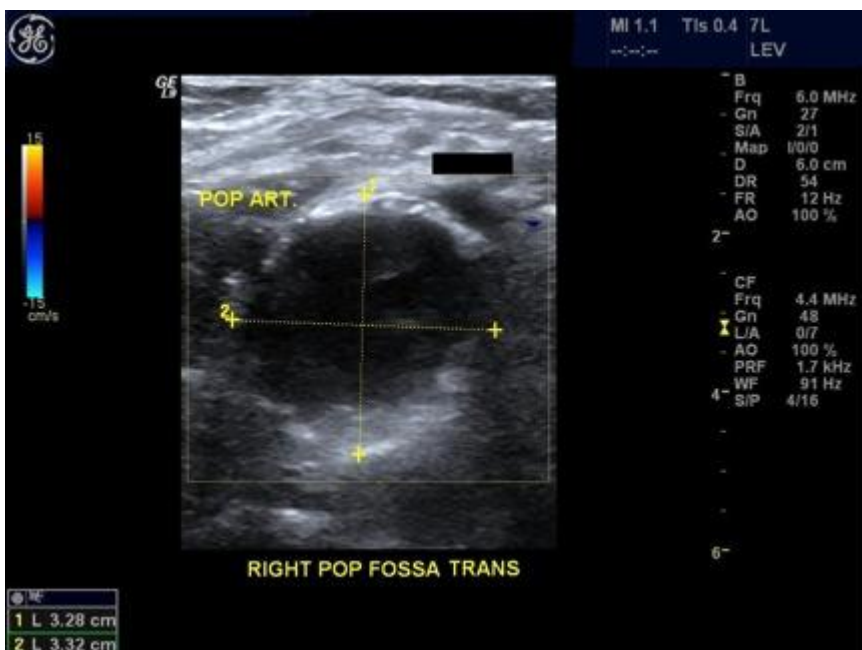


FIGURE 1: Color Doppler image of Right Popliteal Fossa

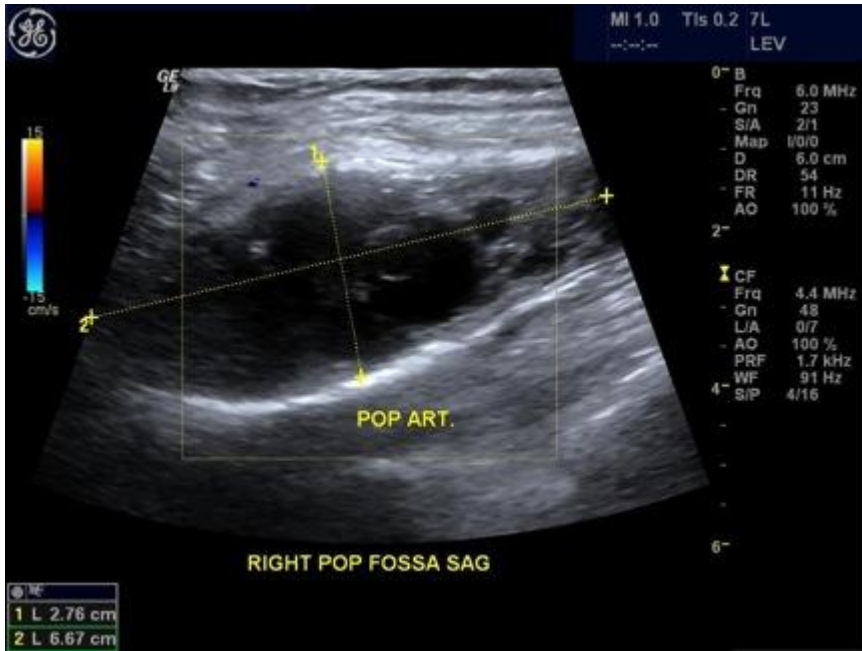


FIGURE 2: Color Doppler image of Right Popliteal Fossa

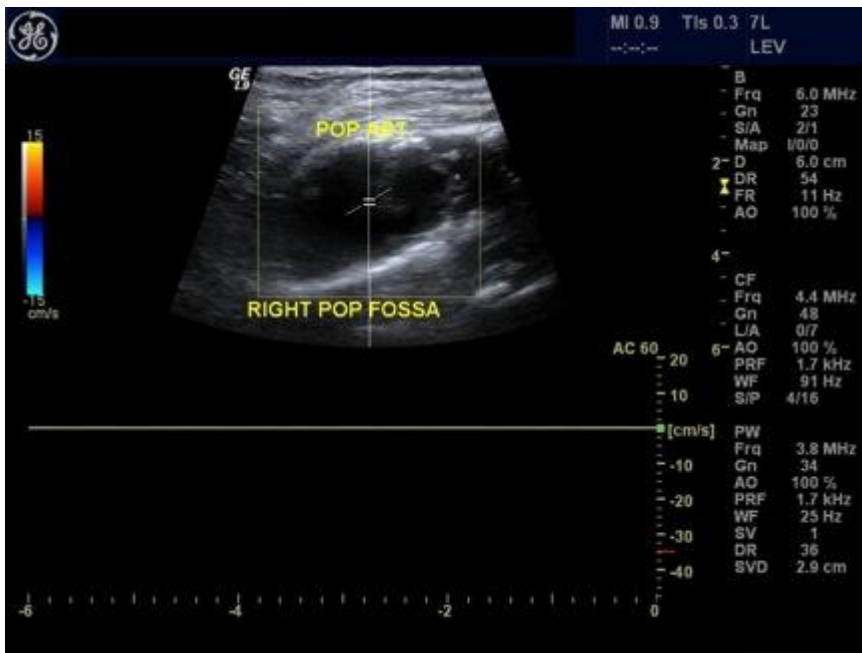


FIGURE 3: Color and Spectral Doppler image of Right Popliteal Fossa



FIGURE 4: Color Doppler image of Right Thigh Bypass Graft



FIGURE 5: Color and Spectral Doppler image of Right Thigh Bypass Graft



FIGURE 6: Color and Spectral Doppler image of Left Thigh Bypass Graft

Click below to take the self evaluation quiz for this case. After successfully passing the quiz you can view explanatory notes about the choices as well as references for further reading before receiving your CME certificate.