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The article by Thakur et al is interesting and thought-provoking.[1] I wish to highlight certain important issues regarding this topic.

1. There have been many articles comparing duplex/triplex arterial mapping (Doppler arteriography) with conventional or magnetic resonance arteriography,[2,3] which have shown good correlation. Color-Dopplers performed by vascular surgeons themselves have also found to be reliable and useful in strategic planning.[4] I consider that Doppler evaluation should be an integral part of a vascular surgeon’s practice.

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Color Doppler arteriography for lower limb arterial occlusive disease

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3. The authors state that the infra-popliteal region evaluation was not included in their study. The importance of assessing distal run-off in arterial occlusive disease is crucial for prognostic purposes in addition to strategic planning of revascularization procedures. Although the most difficult portion of a Doppler evaluation, it needs to be performed with great patience, also making use of additional measures like dependency of limb and power Doppler.

4. For rapid screening purposes, common femoral artery velocity and spectral waveform have been considered for indirect assessment of severity of aorto-iliac inflow disease. A peak systolic velocity of less than 45 cm/s with a monophasic waveform is highly predictive of ipsilateral iliac artery occlusion. Post-exercise duplex scanning has also been suggested to elicit a pressure decrease across a stenotic segment and improve the diagnostic utility of femoral Doppler scanning to estimate aorto-iliac disease.

Taking into account these aspects, it is likely that high-quality triplex guided arterial mapping or Doppler angiography may be considered a safe alternative to conventional angiography for planning lower limb revascularizations, reserving the invasive angiography for complex multisegmental lesions or in presence of severe calcification.

REFERENCES


