Duplex Scanning in Planning for Infrainguinal Revascularization Procedures: Accuracy of Decision Making

Ahmed Hassan Bakr Elbadawy, Bahgat Abdel Hamid Thabet, Mostafa Elsharkawy, Mostafa Saad

Abstract:

Aim: To evaluate the accuracy of duplex scanning as regards the decision making for infrainguinal revascularization procedures either by conventional surgery or endovascular interventions. Materials and methods: The study was conducted prospectively in a 12-month period. Inclusion criteria were patients with disabling claudication or critical limb ischemia. Fifty patients were potential candidates for an infrainguinal revascularization procedure and were included in the study. Forty-seven cases underwent another imaging modality. They included conventional angiography (n=19), magnetic resonance angiography (n=2) or 64 slices multidetector computed tomography (MDCT) (n=26). The other imaging modality was revised by senior vascular surgeons who were blinded to the duplex decision and their decision was reported. We observed the agreement and disagreement among different imaging modalities. Duplex accuracy as regards the decision-making was measured in reference to the intraoperative findings and post-intervention results. Results: Accuracy of duplex scanning as regards the decision-making was 96%. Conclusion: A wide range of infrainguinal revascularization procedures could be done based on conclusive duplex scanning.

Published In: