The stronger the pressure, the better the outcome

Compression with 23 mm Hg or 35 mm Hg stockings after saphenous catheter foam sclerotherapy and phlebectomy of varicose veins: a randomized controlled study

Cavezzi A, Mosti G, Colucci R, Quinzi V, Bastiani L, Urso SU. Phlebology 2018 Jan 1:268355518776127. [Epub ahead of print]

Conclusion: Compression with 35 mm Hg stockings resulted in fewer postoperative symptoms and less edema after saphenous ablation with foam and concomitant phlebectomies compared with 23 mm Hg stockings.

Summary: Currently, no evidence-based guidelines exist recommending the type, pressure, or duration of postoperative compression bandages or stockings after venous interventions. Despite the minimally invasive nature of saphenous ablation, compression use will alleviate pain, edema, and bruising after treatment. This study randomized 94 patients to either 23 mm Hg or 35 mm Hg compression stockings after foam sclerotherapy of the great saphenous vein and phlebectomies. Patients were assessed at postoperative days 3, 7, and 40. The cohorts were well matched in terms of demographics and severity of venous disease. Both compression levels were well tolerated. Patients who wore the higher compression stocking had milder symptoms, improved healing, and decreased tissue edema as measured by bioimpedance spectroscopy. However, both cohorts had a beneficial effect from compression.

Comments: The jury is still out on the ideal duration, pressure, and type of postprocedure compression. However, it is important to encourage early compliance with the compression regimen after varicose vein interventions to decrease symptoms and swelling and to improve healing. Prescription-grade compression stockings are probably more effective than elastic wraps with well-regulated pressure. Compliance is key to effectiveness.

Once again, aspirin is the drug of choice

Rivaroxaban for stroke prevention after embolic stroke of undetermined source

Hart RG, Sharma M, Mundl H, Kasner SE, Bangdiwala SI, Berkowitz SD, et al. N Engl J Med 2018;378:2191-201.

Conclusion: In this prospective, multicenter phase 3 study, rivaroxaban did not prevent more recurrent cryptogenic strokes than aspirin and was associated with excess major bleeding, resulting in early termination of enrollment.

Summary: Cryptogenic strokes, defined as embolic strokes of uncertain origin, represent 20% of ischemic strokes and are associated with a high rate of recurrence. In this study, rivaroxaban was compared with aspirin for secondary preventive therapy after cryptogenic stroke. The study enrolled 7213 multinational patients who were randomly assigned to treatment with a daily dose of rivaroxaban (15 mg) or aspirin (100 mg). The primary efficacy end point was first recurrence of ischemic or hemorrhagic stroke or systemic embolism, which occurred in 5.1% of the rivaroxaban group and 4.8% of the aspirin group. Recurrent ischemic stroke occurred at about the same rate in both cohorts (5% per year). However, the main safety outcome, which was incidence of major bleeding, occurred in 1.8% of patients taking rivaroxaban and 0.7% of aspirin takers. Based on the phase 3 study findings, which demonstrate that rivaroxaban is no better than aspirin in preventing recurrent stroke and is correlated with a higher risk of bleeding, researchers halted the trial early.

Comments: This trial was halted for lack of benefit and excess bleeding associated with rivaroxaban, thus questioning the role of anticoagulation in survivors of embolic stroke of undetermined cause in preventing recurrent stroke. These results were opposite of the Cardiovascular Outcomes for People Using Anticoagulation Strategies (COMPASS) trial (Lancet 2017 Nov 10; pii: S0140-6736(17)32458-3), which showed that rivaroxaban (at a lower twice-daily dose) was highly effective in preventing secondary cardiovascular events, including stroke, in patients with stable vascular disease. Maybe this regimen should be studied instead for secondary stroke prevention in patients with stroke of undetermined source? Interestingly, some of the editorials commented that the subset of patients with intermittent atrial fibrillation, thus a confirmed source of emboli, may benefit from anticoagulation.