What is the best surgical management for arterial occlusion of the lower extremity?

Evidence-Based Answer
Patients who receive stenting with percutaneous transluminal angioplasty (PTA) are able to walk longer at 12 months posttreatment than patients receiving PTA alone (SOR: A, meta-analysis). Patients who undergo bypass grafting for critical limb ischemia have a higher incidence of procedural complications, but no difference in amputation rate, compared with those who undergo PTA (SOR: A, meta-analysis).

A 2009 Cochrane review of 8 RCTs included 968 patients with peripheral arterial occlusive disease randomly allocated to PTA alone or PTA plus stenting and followed for more than 24 months. No statistically significant differences were noted between the groups in age, sex, smoking, dyslipidemia, diabetes, or hypertension. Clopidogrel and aspirin were used for long-term anticoagulation in some of the studies.

Treadmill walking distances were longer in patients with PTA plus stent versus PTA alone observed at 12 months (2 trials, N=240 observations; mean difference 63 m; 95% CI, 48–77). Only 1 trial (N=208 observations) reported quality of life at 12 months, which showed no significant difference between patients treated with PTA alone or PTA with stent insertion. There was no significant difference at 12 months in either physical or mental quality of life between the groups.

A 2007 Cochrane review of RCTs of bypass surgery versus control or any other treatment identified 8 (N=1,200) trials, 4 of which compared bypass surgery with PTA. Key outcomes were mortality rate and progression to amputation.

One study comparing PTA with bypass surgery found the mortality risk at 30 days to be similar for patients with critical limb ischemia (Peto OR 1.9; 95% CI, 0.75–5.0). Another study found the risk of death to be similar at 12 months in patients with intermittent claudication. A third study of veterans with intermittent claudication found an increased risk of death in the bypass group (Peto OR 1.7; 95% CI, 1.0–3.0) at 49 months. The last study to compare PTA with bypass found a reduced risk of death in the bypass group (HR 0.38; 95% CI, 0.19–0.77).

For progression to amputation, there was no statistical difference between the 2 groups. For complications, patients with critical limb ischemia who underwent surgery had a higher risk of complication compared with the PTA group (Peto OR 2.9; 95% CI, 2.0–4.1, P<.0001). The authors concluded that there is limited evidence for the effectiveness of bypass surgery compared with other treatments.

Lisa Radkay, MD
Kaitlin M. Love, BS
José E. Rodríguez, MD
FSU College of Medicine
Tallahassee, FL

Do regular family meals decrease the incidence of depression in adolescent patients?

Evidence-Based Answer
Yes. Participation in family meals is associated with reduced rates of depression and suicide attempts (SOR: B, consistent cross-sectional studies). However, it is unknown if the association is a causal relationship.

A 2009 cross-sectional study with 145 students from 6 alternative high schools in Minnesota examined the benefits of family meals. Students were given a survey that included questions pertaining to how frequently they had family dinners in the past week and a 6-item depression scale (scores ranged from 10 to 30, with higher scores indicating more depression). The survey also assessed other outcomes not reported here.

Half (50%) ate family dinners 5 to 7 times weekly, 24% 1 to 4 times weekly, and 26% reported never eating family dinners in the last week. Linear regression analysis was performed, adjusting for race, age, socioeconomic status, and sex. The depression score was 16 in the group that ate 5 to 7 family dinners per week, 17 in the 1 to 4 times per week group, and 18 in the never group (P<.05 between the group reporting 5–7 family dinners and the group reporting no family dinners over the past week).

A 2006 cross-sectional study enrolled 99,000 students from sixth to 12th grade. Outcomes were assessed with the Profiles of Student Life: Attitudes and Behaviors survey. The survey asks questions about 40 behaviors and developmental aspects. The survey includes 1 question each on family meal frequency,
Evidence-Based Answer

**Is cognitive behavior therapy an effective treatment for irritable bowel syndrome?**

A 2009 systematic review of 7 RCTs (527 patients aged ≥17 years) examined the efficacy of CBT compared with usual management for the reduction in IBS symptoms immediately after treatment. Of the patients assigned to CBT, 42% had persistent IBS symptoms compared with 61% of patients in the control group (risk ratio [RR] 0.60; 95% CI, 0.42–0.87). None of the studies examined long-term follow-up.

A 2009 Cochrane systematic review that included 17 RCTs (817 patients aged ≥16 years) also evaluated the effectiveness of CBT for IBS. Outcomes were symptom score improvement and abdominal pain. Studies comparing CBT with usual care found no difference in symptom score improvement (scoring not defined) at 2-month follow-up (4 trials, N=133; standardized mean difference [SMD] 0.75; 95% CI, –0.20 to 1.7), although there was a small difference at 3 months (5 trials; N=378; SMD 0.58; 95% CI, 0.36–0.79). Studies comparing CBT with placebo showed no differences on symptom scores at 2-month (5 trials, N=230; SMD 0.68; 95% CI, –0.01 to 1.4) or 3-month follow-up (5 trials, N=230; SMD –0.17; 95% CI, –0.45 to 0.11). There was no difference in abdominal pain at 2 or 3 months with either CBT or usual care and no difference in symptom scores at 6-month follow-up.

A recent RCT compared 8 weeks of mindfulness training, a form of CBT, with a support group control on IBS severity, abdominal pain severity, and abdominal pain frequency in 75 women. Outcomes were assessed at pretreatment, immediately after treatment, and at 3-months follow-up using repeated-measures analysis of variance (ANOVA) to compare group differences over time and paired t-tests to assess differences in individual symptoms.

Women in the treatment group reported greater reduction in IBS severity than those in the control group immediately after treatment (26% vs 6% reduction;