



EDITORIAL

What is the Place of Surgery for Intermittent Claudication?

KEYWORDS

Intermittent claudication;
Surgery;
Management

In recent years, surgery has been used less and less in the treatment of intermittent claudication. Reasons include preoccupation with risk factor control and medical management; evidence that supervised exercise increases walking distance; and the inclination to use percutaneous balloon angioplasty and/or stenting (PTA/S) in preference to surgery whenever possible. Surgery is more invasive than any of these other options with a risk of serious complications. All this has led to a degree of peer pressure against operations on claudicants, which can be particularly difficult for younger specialists whose experience of open arterial surgery is less than that of their predecessors. We argue that avoidance of surgery for claudication is not always justified, and that operations still offer substantial benefit – but only in carefully selected patients.

Good risk factor control is an essential pre-requisite to intervention. A trial drug of therapy (e.g., cilostazol) is reasonable for patients who are unsuitable for revascularisation, but is seldom enough for patients with high aspirations. Supervised exercise programmes produce some benefit, although many patients fail to complete them and they have not been widely adopted. It could be argued that exercise classes benefit a limited number of claudicants who are satisfied with modest improvement.

None of the treatments above can restore walking ability to normal in the presence of significant arterial occlusive disease: only a revascularisation procedure can do that. Sufficient time should have elapsed since the onset of symptoms; and counselling should ensure that the patient is sufficiently disabled to want intervention and its attendant

risks. Counselling can be challenging: some patients do not seem to grasp the small but serious risks, or to balance these wisely against their wish walk further.

Percutaneous transluminal angioplasty with or without stenting (PTA/S) is always the intervention to consider first, but the technical possibilities need to be weighed against the likelihood of long term success. Decision making contrasts with that in critical ischaemia, when long term patency is of less importance.

Most of the evidence about surgery for claudication is from before current standards of risk factor control and specifically before statins: patencies may therefore be better now. Publications have often mixed claudicants with critical ischaemia patients, whose outcomes are poorer.^{1,2} Historical reports may therefore “undersell” the potential benefits of surgery for claudication.

For aortoiliac disease surgery can offer significantly better patency rates for selected patients, but these need to be balanced against occasional mortality and a greater risk of complications, compared with PTA/S.^{1,3} Crossover grafts (femorofemoral or iliofemoral) are often combined with PTA/S for treating aortoiliac disease, with reasonable results in the medium term for a low risk of complications (around 6%) and mortality (around 1%). These, and unilateral iliofemoral bypasses, seem reasonable to offer to suitable claudicants who are sufficiently disabled. Localised common femoral stenoses are more suitable for endarterectomy than for PTA/S. Common femoral/profunda endarterectomy is a relatively small procedure with good expectation of long term patency and low operative risk.⁴

Femoropopliteal bypass grafts are the main area of controversy. There is a lower threshold for offering PTA/S, which is well justified for TASC A or B pattern disease, but for TASC C and D disease vein bypass may be preferable for long term patency in low risk patients.⁵ The substantially lower patencies for synthetic femoropopliteal grafts argue against offering synthetic grafts to claudicants.⁶

If femoropopliteal bypasses occlude only about 24% patients are worse than before and only about 3–5% progress to amputation⁷ (similar to the natural history of untreated claudicants).⁸ Nevertheless, clinically obvious occlusion of a surgical bypass does propel surgeons to early reintervention, in contrast to reocclusion after angioplasty. This may not always be wise – especially after repeated occlusion of synthetic bypasses, for which the outlook is poor.⁹

Decisions about interventions for claudicants are unlikely to be better informed by controlled studies: recruitment rates into randomised trials on claudication have been disappointingly poor.¹⁰ Surgical procedures which can offer a worthwhile chance of long term success, with relatively low risk, are common femoral/profunda endarterectomy, iliofemoral/femoral bypass and femoropopliteal bypass using good autologous vein. Vascular specialists should not feel remiss in offering these operations to carefully selected claudicants who wish to walk further and whose quality of life may be greatly enhanced as a result.

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