Pain in the leg(s) on walking and which is relieved by rest is, by some margin, the commonest clinical presentation of lower limb peripheral arterial disease (PAD). It is likely, therefore, that even before Charcot described the syndrome and coined the term intermittent claudication (IC) in 1858 (from the Latin, claudicatio, meaning to limp, apparently after the Emperor Claudius), millions of affected individuals across the world will have sought medical advice and undergone treatment for this condition.

As such, it would probably be reasonable for patients to assume that those purporting to be experts in, and offering therapeutic intervention for, IC would have had ample opportunity to conduct high-quality research into this condition and so have at their disposal a large body of reliable and credible evidence on which to base their treatment recommendations. However, nothing could be further from the truth, as the evidence base underpinning the treatment of IC remains embarrassingly poor. Almost 25 years after Perkins and his colleagues started randomising patients, there is still no consensus regarding the relative merits of (supervised) exercise and interventional treatment (angioplasty, stenting, surgery) for this large and heterogeneous patient population. What Perkins et al. did show, in their seminal randomised controlled trial (RCT), was that patients with IC are at high risk for cardiovascular death, but at low risk of amputation and that exercise therapy was superior to angioplasty in terms of walking distance at least in the medium term. In the longer term, both exercise and intervention were equally effective, or perhaps equally ineffective, depending on whether your glass in life is half full or half empty.

A British Medical Association Medline search of ‘intermittent claudication’ against ‘exercise’ indicates that since 1996, almost 1000 English language articles have been published on the subject. However, with great respect to the authors, it is only a tiny minority of these “post-Perkins” papers that provide any credible evidence on which to base clinical practice. Disappointingly, even the subsequent RCTs, when subjected to rigorous scrutiny (www.gradeworkinggroup.org) by bodies such as the UK’s National Institute for Health and Clinical Excellence (NICE) (www.nice.org.uk) for the purposes of Clinical Guideline Development, are usually found to be seriously methodologically flawed and to provide low quality evidence in which the organisation (and healthcare commissioners and purchasers) can have little confidence.

However, there are a dozen or so RCTs that have compared various forms of supervised and unsupervised exercise and these fairly consistently show that supervision leads to more clinically meaningful, and significantly greater improvements in walking distance; although what form and duration of supervised exercise is most effective remains unclear. There are less than ten reasonable RCTs (including the Oxford trial), that when combined have randomised just a few hundred patients to different types of exercise therapy and various surgical and endovascular interventions. This tiny and heterogeneous data set has been subjected to endless interpretation, re-interpretation and over-interpretation, resulting in a wide range of views as to what they show, or don’t show. Accordingly, I would respectfully suggest that the average patient would have to conclude that there is little evidence to support the high costs, and small but real risks associated with interventional therapy, over and above best medical therapy (BMT) and exercise therapy, for the vast majority of patients.

Why is it that even in the UK (which must have one of the most tightly regulated and “evidence based” healthcare systems in the world), that as a vascular and endovascular surgeon, I appear to be at liberty to insert expensive (even drug eluting) stents in the superficial femoral artery for...
mild to moderate IC, while at the same time I have no access to a supervised exercise programme. Moreover, many of the patients who are sent to me (presumably for intervention?) with a primary care diagnosis of IC are still smoking, have uncontrolled blood pressure, have untreated hypercholesterolemia, are not on anti-platelet agents, and not infrequently have undiagnosed diabetes. Once again, our hypothetical, reasonably educated, but non-specialist patient might be surprised, shocked and perhaps even angry that his hard-earned taxes are apparently being spent so unwisely on admittedly sexy, but very expensive and evidence-free, "gizmology". The logic and drivers underpinning the treatment of IC has been even harder for me to fathom in many of the hospitals and clinics I have had the privilege to visit in other parts of the world; however, suffice to say that economics often appear to be an important factor in clinical decision making.

Looking back at the Perkins paper it is easy to be critical; small numbers, incomplete follow-up, mixing femoro-popliteal and aorto-iliac disease, less than optimal medical therapy and so on. However, at the time, it set a new standard for scientific reporting in our specialty and even today, it is quite rightly cited far and wide in the IC literature as one of the seminal papers in the field.

What is so disappointing is that, almost 25 years later, we still do not appear to have moved on very much, if at all. Yes, the "gizmology" has improved beyond all recognition but, in truth, we still do not know how and when that technology should be used and, crucially, how much we should be expected to pay for it, given the, often very modest, clinical 'value-added' claimed. IC is a common and disabling condition that affects more than 1 in 20 of our increasingly ageing population. Surely we can, and we must, raise our game and do the necessary research so that we provide a clinical and cost-effective package of care for these people; care that is driven by health need and sound evidence and not by (endo)-vascular ego or personal and corporate profit.

Disclosures: Professor Bradbury is a member of the Lower Limb PAD Guideline Development Group of the UK’s National Institute for Health and Clinical Excellence (NICE). Professor Bradbury has no other disclosures.