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Treating claudication in five words

When the editor asked me to write an article on treating claudication he said it must be "straightforward . . . of direct use to general practitioners" and not over 800 words. I was tempted to say that I could do it in five words—"stop smoking and keep walking"—but even with the modest fee he was offering this would have resulted in an embarrassingly large number of pounds for each word. I have therefore written more, but those short of time may go straight to the final paragraph.

The most important aspect of treatment is talking to the patient. Is the claudication stable or has it worsened recently, indicating a thrombosis of a stenosed artery and thus the prospect of considerable improvement as collateral vessels develop? What effect is the claudication having on the patient's life? Merely asking how far he or she can walk is of little value. Patients grossly underestimate their walking distance, and the disability caused by being able to walk only, say, 250 m depends on their normal activity: the patient who has to walk 2 km to work will be severely disabled, but a retired person with a car is hardly disabled at all. Doctors should ask patients about smoking and about fears of gangrene and amputation. Most patients with stable claudication may be reassured about amputation, particularly if they stop smoking.¹ Stopping smoking may well be the only "treatment" required, and it also increases the walking distance.² In my experience nicotine gum raises the rate of those who succeed in stopping from a dismal 5% to a poor 25%.

Exercise increases the distance the patient can walk,³ presumably by dilating collateral vessels, although recent work⁴ has shown that blood viscosity is also reduced by exercise. The form of exercise prescribed must be acceptable to the patient: thrice weekly "treadmill classes" at a hospital five miles away are of no use to workers. Getting off the bus or parking the car 1.5 km from work and thus walking 3 km a day is more likely to be acceptable. Avoiding traumatic chiropody and pressure sores from ill fitting shoes is important in those with very severe claudication that verges on chronic ischaemia.

The many uncontrolled trials of drugs alleging benefit are worthless because many patients improve spontaneously. Even so called "positive" controlled trials often have serious flaws such as large numbers of unexplained drop outs⁵ and

retrospective analysis of subgroups ("data dredging")^{6,7}; and even then the usual claim of 20-30% increase in walking distance may be statistically significant but it is unimportant clinically. Finally, the reluctance of journals to publish negative studies results in a positive reporting bias.

Antiplatelet drugs may delay progression of atherosclerosis,⁸ but this requires confirmation. I use them in patients with a clinically obvious stenosis and no contraindications. Hyperlipidaemia is probably worth treating in patients under 60, but I am not convinced that there is benefit in treating older patients. Whether β blockers adversely affect walking distances is still controversial, but it seems likely.⁹ Patients with appreciable claudication should thus be switched to vasodilator drugs such as nifedipine or captopril. Haemodilution produces benefit¹⁰ but is logistically difficult and in my experience few patients persist with it. In patients with appreciable claudication and a bruit over the abdominal aorta or the iliac or superficial femoral arteries balloon angioplasty may be worthwhile.¹¹ Streptokinase has only a limited success rate with serious complications¹² and is not recommended.

Finally, we come to surgery. To get benefit from an operation patients have to clear three hurdles. Their disability must be bad enough for them to be able to say after the operation "That was rough but worth it—it has made a big difference to my life." Next they must not have other diseases that will increase the risk and limit the benefits of operation—for example, angina or osteoarthritis. Angina is the most serious contraindication as it limits both benefit and life expectancy. Finally, an angiogram must show a lesion that can be bypassed with a good chance of long term benefit.

Thus, in summary, the treatment of intermittent claudication is reassurance that gangrene and amputation are most unlikely, advice to stop smoking and keep walking, treatment of hypercholesterolaemia in those under 60, and referral to a specialist if there is evidence of an arterial stenosis or if the claudication is severely disabling. In practice therefore the treatment for most patients is "stop smoking and keep walking."

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Health hazards from British beaches?

Easter well past, the British public is now preparing for its summer holidays. Many will be heading for the polluted beaches of the Mediterranean, but others, hoping for a better summer than last year, will be holidaying at British coastal resorts. They, and anybody else who is planning a dip in the British briny, will be interested in two studies commissioned from a team at the University of Surrey by Greenpeace in the summer of 1987 and published in a report on *The Public Health Implications of Sewage Pollution of Bathing Water*.¹

The first part of the report is concerned with public perceptions of beach and sea pollution and with the reporting of various symptoms by swimmers and non-swimmers. The resorts investigated were chosen on the basis of pre-existing microbiological data to provide contrasting levels of sea pollution: resort 1, "on the south west coast of England," had 40 times as many faecal coliforms as resort 2, "a small town on the south coast of England." Some 1900 people were interviewed, 1402 at resort 1 and 501 at resort 2. The respondents' perceptions of the cleanliness of the sea and beach were strikingly different for the two resorts and mirrored the microbiological assessments of pollution. Only 19% thought the sea was clean at resort 1 compared with 92% at resort 2. People at resort 1 reported significantly more debris both in the water and on the beach than those at resort 2. The items listed included discarded food or wrappings, bottles, cans, paper litter, dead fish and birds, oil slicks, human or animal excrement, and discarded condoms and sanitary towels. (Interestingly, overt filth seemed to correlate with microbiological filth.)

But does swimming in such polluted water cause illness? Swimmers at resort 1 were significantly more likely to develop stomach upsets, nausea, diarrhoea, or headaches than either non-swimmers at resort 1 or all holidaymakers at resort 2. Swimmers who had immersed their heads at resort 1 were most likely of all respondents to have reported gastrointestinal symptoms. (It is not stated how many head immersions took place or whether the respondents' mouths were open at the time.) Of course, and as the authors emphasise, this was not a controlled epidemiological study

and its findings do not prove a causal link between swimming in polluted water and illness.

The second part of the report concerns the intensive monitoring of seawater in four coastal areas: Kent/Essex, Fylde, Cornwall, and Yorkshire. Twenty seven resorts were monitored twice daily for 10 days, a sampling frequency considerably above the minimum stipulated by the 1975 European Community directive on bathing water. This requires a faecal coliform standard of <2000/100 ml for 95% of samples during the entire bathing season, and member countries were expected to comply with this directive within 10 years. The European Community standard was apparently based on that of the United States Environmental Protection Agency, although it is considerably less exacting. Only 10 of the 27 British resorts investigated by Greenpeace met European Community standards over the sampling period and only 5 met American standards. The Cornish coast was the cleanest, and Fylde the most polluted: all eight of the resorts sampled on the Fylde coast failed to meet European Community standards, and Grannies Bay had the highest faecal coliform count (93 600) of all 27 resorts.

In 1959 the Public Health Laboratory Service averred that "Bathing in sewage polluted sea water carries only a negligible risk to health, even on beaches that are aesthetically very unsatisfactory."² The introduction of European Community legislation on bathing water challenges this view and rightly so. A clean up of British beaches is long overdue. Meanwhile, Cornwall might be the best bet for this year's holiday.

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Anogenital papillomavirus infection in children

Genital warts in adults are sexually transmitted and have an incubation period of up to several months.¹ Concurrent anal warts may occur in both sexes, but warts confined to the anus are commoner in men, particularly if they have anoreceptive intercourse.² Hybridisation studies show that anogenital warts in adults usually contain sequences of human papillomavirus types 6 or 11, but occasionally they contain type 16 or others.³ A few patients develop genital warts that look like common skin warts, but the viral sequences in these have not been identified.

We know much less about anogenital warts in children because only a few cases have been recorded with adequate clinical and virological data. Most of the warts are either vulval or perianal, and analogy with the adult disease suggests that the responsible virus may be sexually transmitted. Doctors in the United States believe that most cases in children result from sexual abuse.⁴ But this is not the only explanation of the warts' pathogenesis. Viruses may be