

develop coherent and equitable national health systems, redirecting resources from curative care in urban hospitals using expensive high tech equipment to primary and preventive care encompassing immunisation, nutrition, and other elements of an enabling environment for better health.

Finally, Africa must look for what South Africa's President Thabo Mbeki, speaking of HIV and AIDS, characterised as "African solutions to African health problems." To this end, Africa must revive its universities, once heralded as beacons of progress and hope. In the late 1960s and early 1970s African medical schools such as those at Ibadan (Nigeria), Accra (Ghana), and Makerere (Uganda) were counted among the finest in the developing world, engaged in the basic and applied research of typically African health problems. Only when a critical mass of African researchers working on African soil has been restored

will Africa begin to generate new knowledge relevant to its most pressing health problems.

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New treatments for varicose veins

Lack of robust evidence, longer operating time, and greater expense are limitations

Recent press reports have generated considerable interest in new techniques for treating varicose veins, claiming major advantages over conventional surgery. Their main aim is to reduce operative trauma and bruising associated with stripping, leading to quicker postoperative recovery. All these methods depend on the use of duplex ultrasound scanning during surgery to monitor obliteration of the vein lumen. Evidence about these new techniques is limited to case series and registry data, largely in private practice settings. Many vascular surgeons have therefore regarded the claims for their success with some scepticism, especially when press reports have portrayed conventional surgery in a falsely unfavourable light. The new methods may well offer some advantages, but they need further stringent evaluation.

Surgical stripping of the long saphenous vein is by far the commonest form of treatment for varicose veins, with more than 60 000 operations each year in England alone. The reasons for treatment range from complications like bleeding or ulceration to the much commoner complaints of discomfort or unsightliness. Indications for specialist referral are the subject of recent advice from the National Institute for Clinical Excellence.¹ Support hosiery can control symptoms but many patients dislike support stockings or tights; while injection sclerotherapy is inappropriate for most symptomatic varicose veins, because recurrence is common if there are incompetent valves in the long saphenous vein.^{2,3}

The established treatment for long saphenous varicose veins is surgery,^{2,3} in the form of saphenofemoral ligation and stripping, which involves an incision, 2-5 cm long, in the groin and a short incision, less than 1 cm, near the knee, with tiny incisions, 2-5 mm long, to remove the varicosities (phlebectomies). Various techniques are in use for stripping the long saphenous vein, aimed at reducing the incidence of postoperative bruising, and some surgeons ligate veins or use a tourniquet when doing phlebectomies. Compression bandaging is standard practice, and many patients suffer little bruising or discomfort. Some, however, develop extensive bruising, lumpy haematoma, and pain, especially in the context of large varicose veins, obesity, and heparin prophylaxis. In the long term at least one third of patients develop further varicose veins, in either the treated or the untreated leg.

Three new methods have been promoted to close off the long saphenous vein under ultrasound control, avoiding a groin incision and gaining access to the vein by a small incision or puncture near the knee. Radiofrequency ablation⁴⁻⁶ involves use of a radiofrequency probe to obliterate the vein by controlled thermal injury. The probe is pulled slowly down the vein from the groin with simultaneous application of pressure to close off the lumen. The long saphenous vein can also be obliterated using a laser probe.^{7,8} These techniques can sometimes be used for veins other than the long saphenous vein,⁵ but varicosities are usually removed by phlebectomies in the traditional way.

A third new method ("varicose veins cured by a single injection") is a novel application of sclerotherapy, in which sclerosant is mixed forcibly with air to produce a foam that spreads rapidly and widely through the veins after injection.⁹ Ultrasound monitoring prevents spread of the foam into the femoral vein, although it seems that the passage of small amounts into the deep veins is seldom harmful. Sclerosant foam also fills many of the varicose tributaries, so a single injection with subsequent compression can obliterate these as well.

Proponents of all these techniques claim several advantages over conventional surgery—in particular reduced bruising and discomfort, with quicker return to normal activity. Many surgeons undertake these procedures under local anaesthesia, but general anaesthetic is necessary if there are extensive varicosities.

The long term results of these methods is unknown, although registry data for radiofrequency ablation suggests 90% success at 1-2 years (as good as conventional surgery),⁴ and it is possible that avoidance of scarring in the groin may reduce the neovascularisation which can lead to recurrence.¹⁰ Recurrence seems a particular risk after injection of sclerosant foam, but this treatment is repeatable.

All these methods require a duplex ultrasound machine with a skilled operator, and considerable experience is needed for good teamwork with the surgeon. The equipment for radiofrequency and laser ablation is costly, and operating time is substantially longer than for conventional surgery. Widespread use of the techniques in the health service seems unlikely in the near future because of pressure on time and resources, and the current lack of good evidence of long term clinical effectiveness compared with traditional surgery.

In addition to techniques that avoid stripping the long saphenous vein, new equipment is available for removing varicose veins by "illuminated powered phlebectomies." This involves a suction device with guarded blades which removes veins like a vacuum cleaner. Fluid is instilled around the veins, and they are then illuminated from beneath the skin with a powerful light source. The technique can reduce the number of incisions for phlebectomies, and may have an advantage for patients with varicose veins which are very numerous or in large clumps.

For the present, inquiring patients can be reassured that the new techniques usually replace only one part of the operation for varicose veins (they will still need phlebectomies) and no technique has yet been shown to better conventional surgery in the long term.

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Modern worries, new technology, and medicine

New technologies mean new health complaints

Over recent years there has been a steady and important change in the public's perception of the relation between aspects of modern life and health. Now, at the beginning of the 21st century, people's suspicion of modernity has increased to such an extent that it has undermined their view of their own health, increased their worries about environmental causes of poor health, and fostered a migration to complementary medicine. Concerns about the safety of mobile phones, environmental pollution, vaccines, bovine spongiform encephalopathy, genetically modified food, and food in general have led to a heightened awareness of the effect of environmental changes on health. We believe that these concerns about technological change, which have been largely unrecognised by researchers, have important implications for the way patients interact with health services.

This change in public concerns has obvious and more subtle effects. Despite considerable recent research and official inquiries into new technologies such as mobile phones and genetically modified food, public suspicion remains high. In clinical settings patients are reluctant to start medication or to continue it for an extended period for fear of putting "unnatural chemicals" into their body. At the same time the consumption of unproved herbal and alternative "natural" remedies is increasing.¹ This anxiety is reflected in the pattern of presentations of psycho-

somatic illness: the number of illnesses attributed to environmental factors—for example, sick building syndrome, multiple chemical sensitivity, total allergy syndrome, and 20th century disease—has increased.²

The milieu that has fostered this unease with modernity is an increase in the public's fascination with personal health and medicine, as evidenced by the burgeoning of gyms and fitness programmes, and the widespread adoption of a "healthy lifestyle."³ The media's increased coverage of health topics, in stories on the dangers lurking in ordinary activities such as air travel and vaccination, has raised worries about routine health care and increased people's perception of their vulnerability to new and exotic illnesses. Media stories also tend to misrepresent the dangers of new environmental influences and aspects of modernity, while playing down more mundane causes of ill health, such as the link between tobacco and heart disease.⁴ This focus of the media on risks with a novelty value fosters the belief that they are far more common than they actually are.

The result of this deluge of information on the supposedly pervasive risks to personal health is that people now feel much more vulnerable. Normal everyday symptoms such as headache and fatigue are now more easily interpreted as signs of disease or ill health. Attributions made by patients about the cause of their illness often involve environmental pollution, and they

BMJ 2002;324:690-1