provision of underused support services in every district. A fully staffed facility for digital subtraction angiography could probably serve the needs of a population of over a million but would stand idle for much of the time in an average district general hospital. A vascular specialist working singlehandedly in a small district would probably not be able to provide a full range of cost effective services to the local population, and evidence suggests that tertiary referrals are not providing equal access to services.³

One effect of the recent health service reforms is that neighbouring hospitals are often seen as competitors, and, as shown in the Oxford region,³ health authorities may be buying different vascular services depending on the local arrangements. A system capable of solving the current problems is unlikely to evolve naturally, as a result of market forces. Thus if equal access to a high

quality and cost effective vascular surgical service is to be achieved then national or regional strategies for vascular surgery must be developed.

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(Accepted 11 April 1994)

Commentary: The obituary of general surgery?

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Good organisation of vascular surgical services need not be accompanied by the emergence of vascular surgery as a separate specialty, but J A Michaels and colleagues are right to point to the need for change. Patients referred to a surgeon by their general practitioner often ask the surgeon whether he or she is a specialist in their problem. By the next century no patient will wish to be sent to a general surgeon. The obituary of general surgery is in view.

Vascular surgery is a good example of these trends, and so the main thrust of the comments of Michaels and colleagues should be supported. Patients can indeed expect emergencies to be managed by expertly trained vascular surgeons doing elective vascular surgery during the day, and patients must have proper access to the necessary skills. The current requirement of one full time vascular surgeon per 250 000 population¹ is supported by the report on vascular surgical services in Scotland, which recommends six major vascular units with three surgeons per unit for the whole population of Scotland of just over five million.²

The Scottish report and Michaels and colleagues both call for vascular units to have an emergency vascular rota, a vascular laboratory, colour duplex and spectral Doppler ultrasonography, computed tomography, access to a high dependency unit and intensive care, short stay beds, and excellent angiography at operation. The Scottish report recognises further the need for intermediate vascular units with lower levels of vascular facilities. Such intermediate units could make tertiary referrals to the regional vascular service, as well as satisfying market forces and the requirements of the patient's charter and the expectations of NHS trust hospitals of treating as many patients as possible as close to their home as possible. A hub and spoke model seems to be ideal.

Specialist vascular surgeons must be available

Undoubtedly, patients must have access to a specialist vascular surgeon just as they must have access to a specialist breast surgeon or specialist in gastroenterology, surgical oncology, transplantation, or urology. Equally patients can expect a specialist surgeon to have received a broad training in order to manage emergencies at night. Surgeons on acute on

call rotas require training in many aspects of surgery, and they will soon expect to perform elective surgery entirely within their subspecialty during the day. Urology split off some 25 years ago. Vascular surgeons have decamped in France and Germany in recent years, but the remaining member states in the European Union recognise only a monospecialty of surgery and have stopped using the term general surgery.

The European Union of Medical Specialties in Brussels defines the monospecialty of surgery in terms of being responsible for acute on call take in surgery and having within it subspecialties including vascular surgery; similar training is required for such surgeons until the last two years. Vascular surgeons in the United States split from the monospecialty of surgery a decade ago, and it is difficult to see that this has resulted in better relationships between vascular surgeons and those they left or improvement in patients' chances of access to the optimal specialist.

Coping with on call demand

There can be no argument against the need for regrouping vascular surgical services in the way mentioned by Michaels and colleagues and in the Scottish report.² With this reorganisation, however, general surgeon practitioners will not in the future have patient and purchaser support for elective surgery. General surgery as a concept is doomed. However, the monospecialty of surgery must surely evolve to continue to provide the training that all such surgeons require to be in the front line for acute emergency work, if only to arrange transfer to the appropriate surgeon. The economies of Europe simply cannot cope with the monospecialty of surgery being split into five or six groups with each being on call only for emergencies within its particular specialty. The basic training for all subspecialties in surgery is similar, all groups requiring specialist training in the last two years. Greater dialogue between the subspecialty groups within the monospecialty is required rather than less. Surely vascular surgery should remain a part of this monospecialty while achieving all the objectives required for optimal patient management discussed above.

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