Heart Association issued a press release last year about a controlled study showing the benefit of adjunctive hyperbaric oxygen after coronary thrombolysis. Similar studies are urgently needed in stroke.

Facilities in Britain are grossly inadequate, even for the acute indications for hyperbaric oxygen. Treatment of problem wounds requires a simple chamber in every hospital. This would save the NHS millions of pounds a year.

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Association raises awareness

EDITOR,—The British Isles Group of Hyperbaric Therapists (BIGHT) represents almost all the hyperbaric facilities in British Isles that are capable of receiving emergency referrals; we write from the association's annual conference. In his editorial Eric P Kindwall highlights the lack of awareness of many doctors regarding the potential benefits of hyperbaric oxygen in a specific range of conditions.[1] This association, however, has been developing clinical and scientific awareness since its foundation in 1990. In addition, it is currently sponsoring work by the Faculty of Occupational Medicine to formulate guidelines for good quality practice in hyperbaric facilities. We intend to publish a list of facilities in the British Isles and their clinical capability consistent with the conclusions of the report of this working party.

This association has also drawn up a curriculum for training and educating staff of hyperbaric units; it is likely to be one or two years before a recognised course leading to a qualification can be set up.

Funding for the specialty has been lacking in the NHS, partly because exaggerated claims without scientific justification have been made for the efficacy of hyperbaric oxygen. Kindwall, however, clearly outlines circumstances in which referral to a hyperbaric facility might be considered. We are happy to provide, on request, a list of hyperbaric facilities that are members of this association.

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Still unproved in necrotising fasciitis

EDITOR,—Eric P Kindwall states that treatment with hyperbaric oxygen reduces the number of operations in and mortality from necrotising fasciitis.[1] Closer inspection of the reference cited does not bear this out despite its title.[2]

The paper retrospectively compares the outcome in patients before and after a facility for hyperbaric oxygen was opened. In the first group 12 patients were treated in over seven years—that is, 1·6/year; in the second group 17 patients were treated in 1·5 years—that is, 11·3/year. This represents a sevenfold increase in exposure to a previously uncommon condition. The authors themselves highlight the importance of radical surgical debridement in the treatment of necrotising fasciitis. They also note that "as the decade progressed clinicians appeared to prescribe earlier and more extensive debridements." In their conclusion they point out that a formal trial would be needed to prove their conclusions. The data presented could also support a hypothesis that the improvement in mortality (from 67% to 23%) was due to earlier, more aggressive surgery by surgeons with more experience of necrotising fasciitis.

I suggest that facilities for hyperbaric oxygen are useful in the treatment of necrotising fasciitis not because they deliver hyperbaric oxygen treatment but because they attract patients with necrotising fasciitis to those who treat the condition regularly; the patients then receive prompt and appropriate surgery.

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Author's reply

EDITOR,—T S Burge has not produced any new data to disprove Riseman *et al*'s conclusions that hyperbaric oxygen is a valuable adjunct in the treatment of necrotising fasciitis.[4] However, work by other investigators looking at the effects of hyperbaric oxygen on the killing of white cells,[1] the synergistic effects of hyperbaric oxygen and some antibiotics,[2] and the results of treatment with hyperbaric oxygen in other infectious diseases[3] tends to support those conclusions. One of us (WAZ) was one of the authors of the paper in question.

We recognise the inherent limitations of a retrospective study.[4] Burge is correct in saying that the development of a hyperbaric facility attracts more patients with necrotising fasciitis. Although debridement seemed to be more aggressive in the later years of Riseman *et al*'s study, most of the surgeons taking care of patients in each group were the same; thus variability due to the surgeons was minimal. One of us (WAZ) took care of many of these patients before and after the establishment of the hyperbaric oxygen unit and noted that patients receiving hyperbaric oxygen as an adjunct to surgical debridement and intravenous antibiotics showed faster resolution of wound sepsis, spent less time in the intensive care unit, and required fewer subsequent surgical debridements than those who did not receive hyperbaric oxygen.

Since the publication of the original paper 31 patients have been added to the study.[5] Of three control patients who could not tolerate treatment with hyperbaric oxygen because of claustrophobia or a large physique, two (67%) died; this compares with only three (11%) deaths in 28 patients who received hyperbaric oxygen in addition to standard treatment of necrotising fasciitis. Since this recent mortality in control patients is not different from the previously reported mortality in controls, despite current aggressive treatment by experienced surgeons, Burge's hypothesis seems unlikely. The overall mortality in the study[4] (1980 to the end of 1992) is now 67% in 15 control patients compared with 15% in 45 patients treated with hyperbaric oxygen ($p < 0.05$).

Given this information from the controlled, albeit retrospective, study, we stand by our recommendation that hyperbaric oxygen should be used routinely as an adjunct to the standard treatment of necrotising fasciitis. Although prospective randomised studies are the best means of evaluating therapeutic effectiveness, we believe that this approach would cause unnecessary deaths and thus be unethical.

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Schistosomiasis

May be contracted through swimming in lake Malawi . . .

EDITOR,—I was struck by the fact that two of the three patients with schistosomiasis reported by P C Goldsmith and colleagues probably contracted the disease through swimming in Lake Malawi.[1] Schistosomiasis is not trivial, as shown in these cases of vulval granulomas and in reports of neuroschistosomiasis associated with paraparesis in a 25 year old man who had swum in Lake Malawi[2] and lesions of the conus medullaris and cauda equina in a 23 year old woman who had swum in Lakes Malawi and Tanganyika.[3]

These reports concur with my clinical experience of screening returning travellers and expatriates: a substantial proportion of those with schistosomiasis have swum in Lake Malawi. Several of these patients, particularly those who have travelled on long distance lorry tours across Africa, including drivers and guides, express surprise at the diagnosis as it is commonly supposed that *Schistosoma* spp are not found in Lake Malawi. Indeed, two of the main guide books for budget travellers in the region state that Lake Malawi is largely free of *Schistosoma*.[4,5] It is time that this myth was exploded.

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