include chlorpromazine, whose effect was limited by drowsiness,18 and bismuth subsalicylate, where the large volumes required precluded trials in children.<sup>19</sup>

The success of oral rehydration in treating acute diarrhoea presents a formidable challenge to pharmacologists. They are being called on to improve on a treatment which is effective, cheap (treatment of diarrhoeal dehydration with the WHO solutions costs about 5p), physiological, and appropriate for diarrhoea of various causes. Furthermore, oral rehydration is virtually free from side effects. 13-9 The fact that the WHO is interested in the development of antidiarrhoeal drugs is an indication that further research and development are worth while.2 Thus the pharmaceutical industry has the opportunity to make a major impact on world health. Meanwhile, oral rehydration represents the spearhead of primary health care in countries where the mortality from diarrhoea is high. Its broad acceptance may lead to the more ready acceptance of other interventions, such as immunisation and measures to improve nutrition and hygiene.

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## Requirements for thoracic medicine

Like other specialists, proponents of thoracic medicine are convinced of the need for their specialty and are jealous of its standards. The wish to improve care in thoracic medicine has spurred the committee on thoracic medicine of the Royal College of Physicians to issue a report identifying requirements for thoracic medicine in district general hospitals.1 Most of the recommendations are a mixture of sensible advice and a desire to ensure that a minimum standard of practice is achieved throughout Britain, and few would argue with them. The document has at least one contentious recommendation, however: that referring to the minimum requirements for consultant staffing. The committee states clearly that at least one consultant specially trained in thoracic medicine should be available in each district general hospital. It also proposes an average of one consultant per 150 000 population, and, though this has already been achieved in numerical terms, many of the consultants are bunched in districts with teaching hospitals or regional centres. Hence some districts are still left without a consultant trained in thoracic medicine.

Thoracic medicine is not alone in wishing to be represented in every district, but the number of medical subspecialties is growing and few district hospitals could accommodate a consultant in every claimant specialty. This is a particular problem in subspecialties such as thoracic medicine, as most chest consultants also practise general internal medicine, and too many subspecialists may reduce the volume of general acute medical work handled by individual physicians below what some fear is the threshold necessary to maintain skills. Part of this objection depends on the attitude of physicians to the amount of work that they can and should handle as well as their historic view of the nature of consultant work. In turn this depends on our existing staffing structure, with its heavy dependence on junior doctors. The central thrust of the Short report was that consultants should undertake relatively more care and an expansion of their number might fortuitously increase the range of subspecialties available to every district.2

Although future consultant expansion may help to absorb some of the competing pressures by medical subspecialties for district representation, the problem is with us now. Representatives of each subspecialty argue fiercely that they require a consultant in every district hospital and the college committee on thoracic medicine is no exception.

A substantial proportion of the workload of general internal medicine falls within the remit of thoracic medicine. This is not surprising as about a quarter of all deaths in men are attributable to respiratory diseases, which also account for nearly a third of absences from work in Britain.3 Parallel to this is the fact that nearly a quarter of consultations in general practice are for respiratory disease, a much higher rate than for any other disorder. Though some of this work is suitably managed by general physicians, specialist knowledge meets an important need which might be expected to occur in any district hospital given this burden of respiratory disease.

Specialist training also has a practical benefit as many respiratory diseases respond to treatment once adequate diagnosis and assessment have been carried out. In particular this applies to asthma, which has a prevalence of between 2% and 5%,4 though if wheezing is taken as a symptom then 11% of children have it56 and up to about a third of any population may have complained of it at any one time.7 Nevertheless, deaths from asthma are still occurring, many of them probably preventable.8 Specialists in thoracic medicine also have important skills in the assessment of lung function and advice about allergic disease and intensive care. A service for fibreoptic bronchoscopy under local anaesthesia is a great advantage in a district general hospital, particularly when thoracic surgery may not be available locally. For these practical reasons there is a need for well trained clinicians dispersed to every district rather than concentrated in high technology centres.

Hence thoracic medicine should have a secure future and would be a powerful competitor for consultant representation at a district general hospital. The combination of a high

prevalence of morbidity and mortality due to respiratory disease and the likelihood of successful treatment for many patients should persuade those in the district of the need for a specialist in thoracic medicine. The document produced by the college committee, based on work carried out by the regional representatives of the British Thoracic Society, should also stimulate a greater awareness of this need. Whether every hospital will now rush to appoint someone trained in thoracic medicine is another matter, but at least now each district has some idea of what is required to provide a basic service. All this does not circumvent the central problem of too many subspecialists chasing too few openings in the districts, which needs further thought. Perhaps between the monospecialist and the general physician we need consultants trained in two or three subspecialties. Is it time to consider, say, a geriatrician who has specialised in thoracic medicine and can cover acute medical duties (together with consultant expansion, of course)?

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## Injuries to the lateral ligament of the ankle

Once the diagnosis of a torn ligament is made the surgeon is left with a difficult decision. Should he explore the area at once to attempt a primary repair? Or should he treat the injury conservatively, using surgery later if reconstruction is required? The choice is made more difficult by the problems of selecting materials for reconstruction. Traditionally nearby tendons have been used, either as an active reinforcement or as a tendodesis to replace the damaged structure. Braided nvlon has been tried with little success. The advent of carbon fibre, into which tissues will grow, was hailed as a breakthrough—but problems have now been encountered with this material, especially when it lies within the joint.

Injuries to the lateral ligament of the ankle exemplify these problems. The ligament is divided into three bands, all attached proximally to the tip of the fibula. The middle band, which runs vertically to the os calcis, is known as the calcaneofibular ligament. The other two run forwards and posteriorly from the fibula to the talus and are known respectively as the anterior and posterior talofibular ligaments. They passively stabilise the ankle by preventing excessive inversion of the ankle-hindfoot complex. They are ruptured when the hindfoot is adducted violently, and the anterior division may also be damaged when the foot is violently inverted when plantar flexed. More severe violence leads to fractures of the malleoli.

Cass and Morrey have reviewed the management of injuries to the lateral ligament of the ankle and given firm and sensible

guidelines for treatment.1 They emphasise the need for a carefully taken history, which should not only elicit the traditional story of a twisting injury to the joint suffered in a fall or step on uneven ground but should also exclude other important illnesses. Careful examination is essential. The area will be bruised and swollen. Local tenderness on palpating the individual elements of the ligament may help in assessing the extent of the damage. Radiography is essential to exclude bony injury—and, if total disruption is suspected, x ray films will also be necessary to assess the stability of the ankle both on inversion and on drawing the foot forward on the tibia. These examinations must be performed under an anaesthetic, either given locally into the haematoma or general, and the movements compared with the other side. An increased talar tilt of 30° or more compared with the normal side denotes a complete tear of the lateral ligament. An anterior shift of 2 mm of the foot on the tibia indicates a rupture of the anterior talofibular ligament.

Cass and his colleagues divide the injuries into three grades. Grade 1 is a mild stretch of the ligament with no instability, grade 2 is a moderate but incomplete tear of the ligament with mild instability, and grade 3 a complete tear with gross instability. In grades 1 and 2 the treatment does no more than improve the patient's comfort, for the lesion will heal whatever is done or not done. Supportive bandages, partial weight bearing with crutches, and physiotherapy will provide a satisfactory regimen if the pain is not severe. When pain is a problem strapping or a short spell in plaster of Paris may be required; this will allow the patient to return to full activities in his own time, as the symptoms subside. In grade 3 injuries a stricter regimen is recommended by Cass and his colleagues. They do not believe in surgery in the acute stages, basing their decision on the results of a long term follow up study of ankle injuries treated either by primary repair or by delayed reconstruction. Nine years after treatment the results for each group were similar (American Association of Orthopedic Surgery, General Session, March 1983). Since ankles treated conservatively rarely require surgery later and late reconstruction gives as good results as early primary repair a "wait and see" policy makes sense. This procrastination is supported by Freeman, who found that routine surgical repair of tears of the lateral ligament of ankle produced results inferior to a conservative regimen.<sup>2</sup> The consensus is that these patients should be put in plaster of Paris for six weeks and then gradually returned to activity with the joint protected by strapping. Physiotherapy should be used to strengthen the peroneal muscles.

Even if the ankle shows signs of chronic instability—pain, swelling, and recurrent giving way—surgery is not always required. The patient should be advised to lose weight, wear a float out heel, and women should be advised to use lower heeled shoes. Physiotherapy is rewarding—especially wobble board exercises to re-establish the proprioceptive function of the local muscles and tendons. If despite these measures symptoms persist surgery is effective. Most procedures (for example, of Watson-Jones, Evans, etc) require rerouting one of the peroneal tendons to replace the ligament.

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<sup>1</sup> Cass JR, Morrey BF. Ankle instability: current concepts, diagnosis and treatment. Mayo Clin Proc 1984;59:165-70.

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