to be effective in a patient with very severe poisoning. In the largest series of adult patients yet reported, A. A. H. Lawson and his colleagues[23] have demonstrated that severe hypokalaemia and dramatic changes in acid–base balance may occur with Cumming's regimen, necessitating frequent biochemical monitoring. They have, however, developed an effective modification of the regimen,[23] which leads to neither hypokalaemia nor serious or rapid changes in acid–base balance and so requires only a minimum of laboratory control.

Another method of making the urine alkaline is to use the organic buffer THAM-tris.[24–28] Nevertheless, there is no evidence that this has any advantages over other methods, and M. Gaultier and his colleagues have emphasized that adequate laboratory surveillance is still important.[28] Treatment with acetazolamide, which alkalinizes the urine by inhibiting carbonic anhydrase and increases salicylate excretion,[7] enjoyed a temporary popularity in the treatment of children with salicylate poisoning.[11 29 30] Its use was found, however, to exacerbate the metabolic acidosis which was often already present, and hence acetazolamide fell from favour. At p. 16 of this week's *B.M.J.* Dr. A. G. Morgan and Dr. A. Polak have revived the combined use of bicarbonate and acetazolamide in adult salicylate poisoning. They emphasize the importance of making the urine alkaline, and express concern at the large amount of fluid infused in other regimens. They achieved a satisfactory rise in urinary *p*H and an acceptable salicylate "half-life." Nevertheless, treatment with their regimen still requires careful laboratory control, though further modifications may lessen the need for this.

Occasionally in the very severely ill patient it may be necessary to combine forced alkaline diuresis with peritoneal dialysis or haemodialysis. Haemodialysis alone may be necessary if there is renal, cardiac, or respiratory impairment, and it is unquestionably the most effective method of promoting the elimination of salicylates.[31] Despite this, however, speed is essential in the treatment of acute salicylate poisoning, and a delay of several hours may occur before haemodialysis can be started even when the facilities are available. Hence despite great efforts to achieve a simple, safe, and standardized regimen for salicylate poisoning there is no agreement yet on the optimum method. Most people agree that alkalinization of the urine is important, but there is also no doubt that an augmented flow of urine is also a vital factor in increasing salicylate clearance.

Future of Chest Services

Recently a table prepared by the Ministry of Health showed the medical staffing and prospects of consultant vacancies in the various specialties.[1] The table related to the position on 30 September 1967, and Diseases of the Chest—alone of all specialties—was shown as having "uncertain" prospects and "uncertain" expected annual consultant vacancies. Since then a subcommittee of the Ministry of Health's Standing Medical Advisory Committee (chairman, Professor J. G. Scadding) has published a report on the future of the chest services[2] which should remove some of the uncertainties.

In 1960 the Standing Tuberculosis Advisory Committee considered the future of the chest services and made recommendations aimed at achieving some measure of integration of chest services into the general outpatient department of hospitals. It recommended that the chest physician should be a member of the staff of a general hospital. A survey in 1964 showed that these recommendations had led to differences of interpretation and some problems arising from integration had not been considered. The standing Medical Advisory Committee therefore set up the subcommittee with the following terms of reference: "To consider the general organization of chest clinics in relation to the rest of the hospital service and to make recommendations."

The basic finding of the subcommittee, after considering mortality and morbidity figures, is firmly stated early in the report: "There is every reason to suppose that special provision for the treatment of chest diseases will continue to be necessary in the foreseeable future." Chest clinics have evolved from tuberculosis dispensaries, and the work has become more varied, embracing all forms of pulmonary disease, problems arising from the interrelations of cardiac and pulmonary disease, and pulmonary complications of general systemic disease. At the same time the range of special skills required to deal with respiratory disease is increasing. These developments indicate that specialists in respiratory disease will continue to be necessary and also "that the physician specializing in this way should have a wide knowledge of medicine and can work most effectively with the resources of a general hospital behind him."

The report recognizes that certain valuable features of chest clinics are less well developed in most general hospitals. Among these are an active interest, in collaboration with the local health authority, in preventive and social aspects of disease and the development of facilities through health visitors for supervision of patients treated in their own homes. Co-operative research in therapeutic and other problems has been helped by the existing chest clinic service. It is important that these valuable characteristics of the more or less separate chest clinics should not be lost in any reorganization. The report proposes that each new or rebuilt general hospital should contain in the outpatient department a chest department and specifies the facilities required there. These would include immediate availability of radiographs and provision for simple tests of respiratory function. Accommodation for health visitors and medical social workers should be available, and in all but the smallest departments an office for the sole use of the consultant. Provided radiography can be undertaken during clinic sessions there is no need for a chest department to have its own *x*-ray equipment, and the radiologist will retain overall responsibility for all the radiological equipment. Save in exceptional circumstances the chest department records should be kept with other hospital records.

The subcommittee also proposed that "an appropriate number of beds should be made available in the general hospital for patients suffering from respiratory illnesses, including tuberculosis. Infectious tuberculous patients require to be nursed in isolation and in our view isolation accommodation for this purpose may appropriately be provided within the general hospital. All general hospitals should provide facilities for the routine assessment of chronic bronchopulmonary disease and for the management of respiratory insufficiency and failure." The apparatus for the management of respiratory failure is at present under the control of the department of anaesthetics in some hospitals, while in

[1] *Brit. med. J. Suppl.*, 1968, **3**, 110.
[2] Standing Medical Advisory Committee of the Ministry of Health, *The Future of the Chest Services*, 1968. H.M.S.O.
[3] H.M. (68) 45.

others the physician to the chest department assumes this responsibility. As more physicians become experienced in this field they should assume increasing responsibility.

The report stresses the importance of co-operation by the physician to the chest department with the medical officer of health and general practitioners. Satisfactory arrangements must be made to ensure that patients with abnormal chest *x*-rays are followed up. The personal aspects of preventive work—for example, family contacts—will continue to be the responsibility of the physician to the chest department. The report concludes with the hope "that the evolution of chest clinics into Chest Departments in general hospitals will provide a basis for the best standards of service to the community by improving facilities for clinical work especially in non-tuberculous broncho-pulmonary disease while retaining the advantages which have come from the especially close association which has arisen between the hospital and the local authority services in this specialty." This admirable report has been endorsed by the Standing Medical Advisory Committee and the Central Health Services Council and has been commended to hospital authorities by the Minister of Health.[3] Its emphasis on collaboration between chest physician, family doctor, and local authority is praiseworthy.

Prophylaxis of Recurrent Headache

Migraine is a difficult condition to define, but its single most characteristic feature is that the headaches are paroxysmal, occurring in attacks separated by intervals of freedom. The value of ergotamine in the treatment of the attack has been known for many years, but a response to treatment with this drug should not be accepted as a diagnostic criterion, as it is possible that other forms of vascular headache could be similarly improved.

In a recent detailed analysis of the symptomatology and response to drug treatment of patients suffering from recurrent headache M. A. Barrie, W. R. Fox, M. Weatherall, and M. I. P. Wilkinson[1] have reviewed the treatment of 105 patients attending two headache clinics over a 15-month period. While most of these patients were probably sufferers from migraine, as their headaches were invariably paroxysmal, the authors are careful not to conclude that this was the definitive diagnosis in all cases. They classified their patients into four groups. The first contained patients suffering from hemiplegic or ophthalmoplegic migraine or both (4 cases); vascular headache was accompanied by sensory and motor phenomena which persisted during and after the headache. A second group of patients (71 cases) were suffering from classical migraine—that is, from vascular headaches with clearly defined transient visual and other sensory or motor prodromes or both. A third group (24 cases) consisted of patients with "common" migraine; these suffered from paroxysmal headache with no striking prodromes and the headache was less often unilateral than in classical migraine. A fourth and less specific group of patients (6 cases) also had paroxysmal headaches, which appeared to be a combination of vascular and tension headaches.

While the value of ergotamine in the treatment of the migraine attack itself is well established, the authors remark that the use of this drug for prophylaxis is less well founded, and they mention in this connexion favourable reports on methysergide,[2-8] a powerful serotonin antagonist.[9] This drug, however, has a serious side-effect in causing retroperitoneal fibrosis.[10] While ergotamine is believed to work through its action as a vasoconstrictor, and methysergide owing to its antagonism of serotonin, it is less easy to explain why claims have been made that ergometrine[11] is therapeutically effective, as it has no appreciable vasoconstrictor activity but stimulates the central sympathetic nervous system.

To compare the effectiveness of these remedies the authors conducted a trial in which each of the 105 patients was treated with coloured capsules containing ergotamine tartrate in low or high dosage (0.5 or 1.0 mg. daily), ergometrine maleate (1.0 or 2.0 mg. daily), or methysergide hydrogen maleate, again in low or high dosage (3.0 or 6.0 mg. daily). Each patient was required to take 1 capsule of the drug per day for the first two days of a trial, two a day for the next two days, and three a day for the following 24 days, and then at the end of a month was given another remedy. The effect of aspirin 300 mg. and of prochlorperazine 5 mg. on individual attacks was also tested throughout. The consumption of drugs was assessed by counting unused returned capsules. In about 40% of all the periods of treatment less than two-thirds of the prescribed medication was found to have been taken, and unfortunately each month some patients defaulted from the trial, so that only 61 completed the four-month course. There was no clear distinction between patients in the different diagnostic groups in their response to treatment. But when allowance was made for failure to take capsules it was clear that the higher doses of the ergot derivatives were more effective than the lower, as judged by the reported number and severity of attacks occurring during the period of treatment. Methysergide in higher dosage (6 mg. per day) was marginally most effective but also produced more unwanted effects, including defaulting from the trial, than any other treatment. Contrary to expectation, aspirin and prochlorperazine were indistinguishable in their effects or lack of effects in alleviating either headache or nausea and vomiting.

This careful analysis shows the difficulties which arise in assessing the effects of drugs given either prophylactically or for individual attacks in a disorder so much influenced by subjective factors as migraine. Perhaps it may be said that the periods of treatment with individual drugs were too short. It would nevertheless appear that regular treatment with ergotamine tartrate may, over a period of a few weeks, be effective in reducing the severity and frequency of attacks of migraine and that methysergide is probably more effective still. But the latter drug is more likely to cause unwanted side-effects even when given for only four weeks, in which period presumably the risk of retroperitoneal fibrosis would be unlikely to arise.

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