

gated in a cardiac catheter room became acutely psychotic whenever the light was switched off; another developed a marked paranoid psychosis when his haemoglobin fell below 10 g/100 ml.

The current preoccupation with non-infective causes of organic psychosis and the successful control of infection have diverted attention away from infective causes, yet these are still a relatively common cause in Britain and very common in other parts of the world. Schwartz<sup>1</sup> recently described the case of a 40-year-old man who developed a manic psychosis in association with Q fever, and his report referred to a description by Steinberg *et al.*<sup>2</sup> of a similar syndrome occurring during the course of influenza. Toxic confusional states and frank organic psychosis can complicate any infection and may be precipitated by a number of factors. Delirium is common in pneumonia, but it is usually of short duration and disappears when the infection responds to treatment. Associated anoxia, however, especially in the elderly, can exacerbate mental symptoms, which may then be treated with sedatives leading to further confusion of the patient. Certain infections such as influenza or infectious mononucleosis may be complicated by encephalitis; others such as otitis media or pneumonia can lead to brain abscess or pyogenic meningitis. Encephalitis and meningitis can both present with acute psychiatric syndromes which may obscure the true nature of the patient's illness and lead to delay in diagnosis and treatment. Cerebral malaria and typhoid should always be considered as possible causes of an organic brain syndrome in a patient recently returned from Africa, Asia, or South America. Septicaemia can also present with psychiatric symptoms, as can chronic brucellosis.

Since the problem usually presents suddenly these states are frequently regarded as acute, yet there may be a considerable prodromal state, which, if heeded, would have given adequate time for appropriate action. The arbitrary linkage of acute organic psychosis with reversibility and chronic states with irreversibility is no longer tenable, as is apparent from diseases like dementia paralytica, notoriously associated with a chronic psychosis which is reversible, as are the mental changes associated with myxoedema. Conversely, an acute encephalitis may degenerate into an irreversible organic psychosis.

Treatment of a condition with a multiplicity of causes will be ineffective unless an accurate diagnosis is made. This may be as exhaustive an exercise as the search for the cause of a pyrexia of unknown origin. Without such information, treatment of the psychotic features with one of the range of psychotropic drugs could be dangerous. For example, a patient with a myxoedematous psychosis could be plunged into a dangerous state of hypothermia if chlorpromazine is prescribed for the control of mental symptoms. Once the diagnosis is made and treatment started for the organic disease the excitement or the paranoid state may be readily controlled.

If a patient in hospital or at home suddenly develops acute psychiatric symptoms a careful history should be taken from a relative or friend concerning previous personality and habits, including alcohol consumption or addiction to drugs. Examination may reveal fever or signs of pneumonia or meningitis, while papilloedema may signify a cerebral tumour or abscess. Further investigations will depend on the clinical features of the illness, but blood cultures, biochemical serum tests, lumbar puncture (provided there is no evidence of increased intracranial pressure), E.E.G., brain scan, chest and skull x-ray films, and serological tests for viral infection may all be considered.

## Secure Hospital Units

The simple action of locking a door can have a profound emotional impact on those on either side of it. A terror of incarceration found among many patients with mental illness was one factor leading to the "open door" policy in psychiatric hospitals; yet the opposite reaction is to be seen in the public demand that dangerous or potentially dangerous offenders should be locked away.

While psychiatric hospitals have been moving to more liberal attitudes on restraint of patients judges, penologists, and prison staff have become increasingly concerned about the numbers of mentally abnormal offenders in our already overcrowded prisons. As things are at present these offenders cannot be sent to ordinary psychiatric hospitals, since conventional units have neither the facilities nor the staff to prevent them absconding; and the special hospitals are filled to their limits. As we have stressed repeatedly,<sup>1-6</sup> a hospital cannot at one and the same time look forwards to a therapeutic community and backwards towards the security of a prison.

This unsuitability of normal psychiatric hospitals for the treatment of many mentally abnormal offenders has created a practical problem of such urgency that the Butler Committee<sup>7</sup> last week took the unusual step of publishing an interim report on the need for regional secure hospital units in the N.H.S. The recommendations of the report—which is short, clear, and well-argued—have been accepted by the Department of Health without delay (p. 267).

What is proposed is that each hospital region should have a unit of 50-100 beds providing accommodation for convicted offenders and other mentally abnormal individuals who need medical treatment in secure conditions. Dangerous psychopaths and other patients known to be a real security risk would still be detained in the special hospitals such as Broadmoor; but these new units would relieve prison medical staff of the task of trying to treat mentally abnormal offenders and prisoners who develop mental illness while serving a sentence.

The committee saw it as "absolutely essential" that the new units should be in centres of population, and ideally on the site of a district hospital, where the patients would have easy access to the full range of diagnostic and therapeutic services. Such a proposal ignores the familiar antagonism of ordinary people to the siting in their neighbourhood of units of this kind, and it may be that isolation has its advantages. Patients who need secure confinement cannot really share recreational or other facilities with anyone else—as the report itself admits, "medium security" is a misleading term, and the great danger of the concept is that it can lead to an unsatisfactory half-way house. If these patients need to be confined then the confinement must be fully secure.

The Department of Health's acceptance of the recommendations presumably means that it will get on with the construction of these units quickly—and it is reassuring that the committee recognized that a direct allocation of Government funds will be needed, for health authorities' budgets are already hopelessly overstretched. Another big difficulty will be staffing: a ratio of at least one nurse to one patient is proposed, nurses will have to be of high quality, and it may not be easy to attract them to this type of work. Perhaps these units will not provide a perfect solution to the problem—but at least the report has highlighted its urgency, and the general case made for facilities for these patients is overwhelming.

<sup>1</sup> Schwartz, R. B., *British Journal of Psychiatry*, 1974, 124, 140.

<sup>2</sup> Steinberg, D., *et al.*, *British Journal of Psychiatry*, 1972, 120, 531.

<sup>1</sup> *British Medical Journal*, 1974, 1, 527.<sup>2</sup> *British Medical Journal*, 1973, 1, 247.<sup>3</sup> *British Medical Journal*, 1972, 3, 70.<sup>4</sup> *British Medical Journal*, 1972, 4, 129.<sup>5</sup> *British Medical Journal*, 1971, 3, 443.<sup>6</sup> *British Medical Journal*, 1970, 3, 537.<sup>7</sup> *Interim Report of the Committee on Mentally Abnormal Offenders*. London Home Office and Department of Health and Social Security, Cmnd. 5698, 1974.

## Allergy to Aspirin

Adverse reactions to aspirin have been known for over 70 years;<sup>1</sup> the first description appeared only three years after the synthesis of the drug. Population studies to determine the frequency and nature of intolerance to aspirin have been carried out recently in America in allergic and normal individuals.<sup>2,3</sup> The frequency in those with asthma or rhinitis or both was 89 out of 3,781 or 2.4%. In the asthmatic group the frequency was 4.3%, and those with negative skin tests had more aspirin intolerance (6.8%) than did those with positive skin tests (3.5%)—a significant difference. The frequency of intolerance increased with age and was six times commoner after the age of 50 than before 20. Intolerance was also commoner in women. In patients with rhinitis alone the incidence was 0.7%; and in another, prospective study of 1,378 patients with asthma and rhinitis the frequency of aspirin intolerance was 3.8% in those with asthma, 1.4% in those with rhinitis, and 0.9% in 808 normal subjects.

Symptoms may occur immediately after taking aspirin, but occasionally they are delayed for up to two hours. The onset of the reaction is marked by wheezing and bronchoconstriction, sometimes associated with nausea, vomiting, diarrhoea, angioneurotic oedema, and urticaria.<sup>4</sup> Bronchoconstriction seemed to be the most prominent manifestation of aspirin intolerance in asthmatics, while urticaria was the main feature in patients with rhinitis without asthma. In normal individuals the manifestations of aspirin intolerance were about equally divided between bronchoconstriction and urticaria.<sup>2,3</sup> Aspirin-sensitive asthmatics frequently have nasal polyps, but polypectomy does not alleviate the symptoms or control the asthma.<sup>5</sup> Initially the asthma of patients sensitive to aspirin responds to bronchodilator drugs, but later corticosteroids may be required, though pretreatment with these drugs cannot be relied on to prevent aspirin-induced asthma.

Aspirin is not the only drug to provoke reactions in aspirin-sensitive patients. Similar reactions can occur after indomethacin and other minor analgesics such as the pyrazolones—antipyrine, aminopyrine, and phenylbutazone. Sodium salicylate does not appear to cause reactions.

Since antibodies to aspirin have not been found in the serum of aspirin-intolerant subjects,<sup>6</sup> it seems likely that aspirin intolerance is not mediated through an antibody-antigen reaction. A possible mechanism of aspirin intolerance may be through the prostaglandin system. Both aspirin and indomethacin inhibit the synthesis of prostaglandin PGE<sub>2</sub>, which is a bronchodilator, and PGF<sub>2α</sub>, which has a bronchoconstrictor effect on guinea-pig lung.<sup>7</sup> It is possible<sup>8</sup> that in aspirin-sensitive asthmatics a mechanism may exist whereby the release of PGE<sub>2</sub> is inhibited without blocking the release of the bronchoconstrictor PGF<sub>2α</sub>. Prostaglandin antagonists are known to exist, but investigation of these

compounds is still at the stage of experiments on animals. Psychotropic drugs in common use, such as chlorpromazine, may inhibit the release of prostaglandins,<sup>8</sup> but in the treatment of acute asthma the depressant effect of such drugs on the respiratory centre would contraindicate their use.

The clinician treating asthmatic patients now has a long list of drugs to remember that may worsen asthma, and in the management of the individual asthmatic patient a critical assessment of his drug consumption is essential.

<sup>1</sup> Hirschberg, *Deutsche medizinische Wochenschrift*, 1902, 28, 416s.<sup>2</sup> Chafee, F. H., and Settipane, G. A., *Journal of Allergy and Clinical Immunology*, 1974, 53, 193.<sup>3</sup> Settipane, G. A., Chafee, F. H., and Klein, D. E., *Journal of Allergy and Clinical Immunology*, 1974, 53, 200.<sup>4</sup> Samter, M., and Beers, R. F., *Annals of Internal Medicine*, 1968, 68, 975.<sup>5</sup> Francis, C., *Practitioner*, 1929, 123, 272.<sup>6</sup> Samter, M., and Beers, R. F., *Journal of Allergy*, 1967, 40, 281.<sup>7</sup> Vane, J. R., *Nature New Biology*, 1971, 231, 232.<sup>8</sup> Tohill, A., Bamford, D., and Draper, J., *Lancet*, 1971, 2, 381.

## B.M.A. at Hull

Two tall, isolated concrete pillars beside the Humber river will eventually form one end of the new suspension bridge linking Yorkshire and Lincolnshire; and the project is striking evidence of the spirit of vitality to be found in Kingston upon Hull. The ten days of the B.M.A. visit were so busy for most of the medical visitors that they had little time to look beyond the meeting halls, yet they could not fail to notice this air of enthusiasm and enterprise.

The north of England has a high reputation for hospitality, and this was certainly confirmed at the generous receptions at the Guildhall which marked the beginning and end of the Meeting and at the many other social occasions. Perhaps the B.M.A. was unusually fortunate with the weather; for most of the meeting the sun shone kindly, and while their husbands were busy dispensing and acquiring knowledge the ladies were able to see the beauties and visit places of interest in the surrounding countryside. Mrs. Pauline Lunt, the chairman, and Dr. Margaret Crumpton the secretary of the ladies' committee are to be congratulated on its programme.

After the political activity of the A.R.M. the scientific sessions might have been expected to provide a contrast of academic peace, but as it happened the press interest was stimulated to new heights of excitement by a chance remark about test-tube babies. Ironically, this occurred the day before the sessions on "communication"—the theme discussed by the President, Sir Ronald Tunbridge, in his address on 14 July (see p. 235). The imaginative programme certainly kept the lecture theatres full and the interest flowing, a tribute to the planning of the Conference Secretary, Dr. S. T. Lunt, the General Secretary, Dr. N. E. Crumpton, and the Science Secretary, Dr. J. R. Bennett, whose new ideas all seemed to come off. One innovation which was widely acclaimed was the flock of attractive girls from Hull High School for Girls who combined efficiency as stewardesses with never-failing cheerfulness—and indeed this combination was characteristic of the whole meeting.