

others outside the professional circle—such as relatives, employers, and landlords. The vexed problem of confidentiality could be overcome, it recommends, by asking the patient "when discharge is under consideration, for his written consent to the disclosure of relevant information."

Throughout the report there are frequent references to the part to be played by the National Health Service hospitals in the treatment of patients under restrictions and, indeed, to those needing special care in assessment. To such participation we have repeatedly objected.<sup>3-7</sup> All these patients are potentially dangerous and to commit them to what are both in theory and in practice open hospitals is to court disaster. This is particularly so at the present time, when mental hospitals are under constant attack in the lay press, so that even as an exercise in public relations the admission or transfer of patients to their care known to be dangerous is undesirable to say the least. In the first instance all patients under restriction should be admitted to Special Hospitals, where security is maximum and where the staff are security-minded. If discharge is considered then this should be to hostels where surveillance would be by the combined facilities of the social and probation services. The latter would provide probation officers skilled in the supervision of released prisoners, dangerous or otherwise, who have been incarcerated for long periods. If there are not sufficient places in Special Hospitals or hostels, as is patently the case, then the Government must see to it that they are provided.

Though the committee is to be congratulated on the thoroughness and the expedition of its inquiry, unfortunately the recommendations it makes cannot be accepted without some reserve. Deep down there lurks a nagging doubt whether the elaborate machinery proposed is not an over-reaction. Moreover, are not the existing arrangements (particularly as strengthened when the Young case came to light) in themselves sufficient to protect the public and ensure fair play for those patients in Special Hospitals who pose no threat to society after discharge?<sup>8</sup>

<sup>1</sup> House of Commons, Parliamentary Debates (Hansard) 29 June 1972, col. 1683. London, H.M.S.O.

<sup>2</sup> Home Office Report on the review of procedures for the discharge and supervision of psychiatric patients subject to special restrictions, Cmnd. 5191. London, H.M.S.O., 1973.

<sup>3</sup> *British Medical Journal*, 1967, 1, 317.

<sup>4</sup> *British Medical Journal*, 1969, 3, 426.

<sup>5</sup> *British Medical Journal*, 1970, 3, 537.

<sup>6</sup> *British Medical Journal*, 1971, 3, 443.

<sup>7</sup> *British Medical Journal*, 1972, 4, 129.

<sup>8</sup> *British Medical Journal*, 1972, 3, 70.

## Herpes Hepatitis in Adults

Infection of the liver is a rare complication of primary herpes in adults, though it is a well-recognized and prominent feature of generalized herpes of the newborn.<sup>1-3</sup> Nevertheless, since the report three years ago of T. H. Flewett and colleagues<sup>4</sup> further cases of herpes hepatitis in adults have been reported.<sup>5-8</sup> With one exception, all the six adult patients described have had predisposing factors which almost certainly caused increased susceptibility to infection.

In the case reported by Flewett and his colleagues the patient was pregnant, had hyperemesis gravidarum, and had previously been treated with tetracycline and trifluoperazine, so that there were three possible causes of liver damage.

Two of the subsequently reported patients had extensive burns and one of them was also receiving tetracycline. Another patient was on long-term steroid therapy for asthma. A fifth patient had severe coeliac disease with hypoproteinaemia, which probably predisposed to infection in the same way as did kwashiorkor in children past the neonatal period in whom generalized herpes has been described.<sup>9,10</sup> Only one patient showed no obvious cause for the apparent breakdown in the normal defence mechanisms against what is usually one of the mildest virus infections.

In all patients the hepatitis was associated with primary herpes elsewhere. In four patients this took the form of stomatitis—the commonest symptom of primary infection. But in the two burned patients the primary lesion was a herpetic invasion of the burned skin. The onset of hepatitis was associated with progressive deterioration in the patient's condition. The liver became enlarged, and in the only two patients in whom the investigations were carried out the serum transaminase levels were raised. Two patients became jaundiced. All the patients except the pregnant woman died, and she recovered only after being dangerously ill for four days. At examination post mortem the main findings have been of multiple discrete areas of necrosis in the liver, with the intranuclear inclusions characteristic of herpes-infected cells. Similar changes were present in the adrenal glands of three patients. Herpes simplex virus was isolated from the liver of the five patients from whom specimens were submitted for virus culture and was demonstrated by electron-microscopy in the liver of the remaining patient.

The severity of the disease suggests that patients with herpes hepatitis might be suitable cases for antiviral chemotherapy. None of the patients in fact had had any specific treatment. Cytosine arabinoside has given apparently beneficial effects in severe generalized primary herpes in adults.<sup>11,12</sup> This disease is often accompanied by hepatitis and, like herpes hepatitis, usually follows a primary herpetic stomatitis. If herpes hepatitis is suspected on clinical grounds, a confirmatory liver biopsy should be carried out. If the diagnosis is confirmed, serious consideration should be given to starting treatment with cytosine arabinoside or one of the other antiviral drugs which are active against herpes simplex virus. Cytosine arabinoside is a cytotoxic drug, so that there is some risk that it may itself cause liver damage. But herpes hepatitis is such a lethal condition that its use in this disease is probably justifiable. B. E. Juel-Jensen and F. O. MacCallum<sup>12</sup> recommend giving the drug intravenously in a dose of 4 mg per kg of body weight per day for the first day of treatment followed by 2 mg per kg per day for a further 4 days. Cytosine arabinoside can also depress the bone marrow, so that the white cell count, haemoglobin, and platelets should be checked daily in any patient receiving the drug.

<sup>1</sup> Hass, G. M., *American Journal of Pathology*, 1935, 11, 127.

<sup>2</sup> Quilligan, J. I., and Wilson, J. L., *Journal of Laboratory and Clinical Medicine*, 1951, 38, 742.

<sup>3</sup> Zuelzer, W. W., and Stulberg, C. S., *American Journal of Diseases of Children*, 1952, 83, 421.

<sup>4</sup> Flewett, T. H., Parker, R. G. F., and Philip, W. M., *Journal of Clinical Pathology*, 1969, 22, 60.

<sup>5</sup> Diderholm, H., Stenram, U., Tegner, K. B., and Willen, R., *Acta Medica Scandinavica*, 1969, 186, 151.

<sup>6</sup> Foley, F. D., Greenawald, K. A., Nash, G., and Pruitt, B. A., *New England Journal of Medicine*, 1970, 282, 652.

<sup>7</sup> Francis, T. I., Osuntokun, B. O., and Kemp, G. E., *American Journal of Gastroenterology*, 1972, 57, 329.

<sup>8</sup> Clinicopathological Conference, *British Medical Journal*, 1972, 3, 624.

<sup>9</sup> Becker, W., Naudé, W. du T., Kipps, A., and McKenzie, D., *South African Medical Journal*, 1963, 37, 74.

<sup>10</sup> Kipps, A., Becker, W., Wainwright, J., and McKenzie, D., *South African Medical Journal*, 1967, 41, 647.

<sup>11</sup> Juel-Jensen, B. E., *British Medical Journal*, 1970, 2, 154.

<sup>12</sup> Juel-Jensen, B. E., and MacCallum, F. O., *Herpes Simplex, Varicella and Zoster*. London, Heinemann, 1972.