which defines each symptom precisely. Psychiatrists trained to use this instrument achieve high reliability when rating patients' answers to the questions. The present state examination has been translated from English into languages as diverse as Russian, Chinese, and Yoruba (a Nigerian tongue). Translated versions were used in the International Pilot Study of Schizophrenia, which showed that schizophrenia is an international concept used to categorise similar illnesses throughout the world and which transcends differences in language, economic development, and family structure.

Unfortunately the same cannot be said of the neuroses. Five of the papers at the Bradford congress dealt with differences between western and non-western patients in the presentation of neurotic illness. In particular, non-western patients tend to express emotional distress in somatic terms. Hystera (virtually a historical curiosity in Britain) is still the most common form of neurosis seen in psychiatric hospitals in India. To a great extent the presentation depends on the patient's knowledge of biology and medicine and his interpretation of the symptoms. Asian immigrants to Britain have usually come from places where psychiatrists are few and as a consequence western psychiatry has made few inroads into folk beliefs about sickness. As a result their presentation of distress is predominantly in terms of somatic symptoms, and this is likely to mislead the general practitioner and to result in unnecessary pathological investigations and delay in reaching the correct diagnosis. Guidelines to help doctors deal with immigrant patients have been given in a recent publication by the Community Relations Commission.

One of the papers presented at the congress was a study by Cochrane of admission rates to mental hospitals. He analysed these by country of birth for England and Wales in 1971, taking care to standardise the data by age and sex (necessary since immigrant populations usually show a predominance of males and of the age groups between 20 and 50), and found that Asian immigrants had low rates in comparison with the British population. This might indicate less psychiatric illness among Asian immigrants than among their white neighbours or alternatively that the Asians were underusing the psychiatric services. Again, while the way to resolve this issue is to conduct a psychiatric survey of an Asian immigrant group, the problem is the same: the need for an appropriate survey instrument. It would have to be translatable between English and several Asian languages (Hindi, Urdu, Punjabi) and to be flexible enough to pick up the somatic presentation of neurosis. Several rating scales in use cover the major neurotic syndromes, but all have been developed from experience with western patients, and Professor Giel from Groningen showed how inappropriate such a scale may be when translated and tested on Ethiopian students.

One answer might be the development by psychiatrists in non-western cultures of independent instruments based on experience with their own people. Though it is not easy for such psychiatrists to free themselves from the bias implicit in western training, only when such an instrument is available will it be possible to assess the extent of untreated psychiatric morbidity among immigrants and determine whether the stress of living among the British outweighs the relief from poverty, malnutrition, and physical disease.

Rapid identification of virus infections

A decade or so ago there may have been some truth in the generalisation that there was little point in requesting virological investigations, for by the time results were available the patient was better or dead. Today most of the viruses causing commonly encountered infections have been detected. Furthermore, whenever a rapid and sensitive laboratory diagnosis is required because of its immediate clinical or public health importance, techniques have usually been devised to achieve it, though to detect viruses or their antigens in clinical specimens it may be necessary to use such complex and often expensive procedures as electronmicroscopy, immunofluorescence, and radioimmunoassay.

With negative contrast techniques virus particles may be detected by electron microscopy (EM) in material obtained directly from the patient within a few minutes of collecting specimens, provided they are present at concentrations of greater than about 10^6 per ml. For practical purposes this limits the clinical use of EM to the examination of specimens obtained from readily accessible sites which contain high concentrations of virus. Thus, such herpesviruses as herpes simplex and varicella-zoster and such poxviruses as variola, vaccinia, molluscum contagiosum, and orf (contagious pustular dermatitis) may be readily detected in specimens obtained from lesions of the skin and mucous membranes. Rotaviruses (reovirus-like viruses or duoviruses), adenoviruses, hepatitis A virus, and occasionally enteroviruses may be detected in faecal preparations. Although hepatitis B surface antigen (HBsAg) may be readily detected in the sera of many patients with hepatitis B infections, it is impracticable to use EM for screening purposes. Furthermore, it provides a less sensitive technique than radioimmunoassay or reverse passive haemagglutination for its detection. The rapid detection of herpesvirus infections in immunocompromised patients may be of considerable importance, since the infections may present atypically, be prolonged, and occasionally threaten life.

That some patients respond well to antiviral chemotherapy emphasises the need for rapid diagnosis. Topically applied idoxuridine may encourage healing and reduce the severity and duration of pain. The use of cytosine arabinoside (ara-C) systemically in immunosuppressed patients has not fulfilled its early promise, though more encouraging results have recently been reported with its less toxic analogue, adenosine arabinoside (ara-A) in immunocompromised patients with systemic herpes zoster infections provided it is given early in the course of infection.

EM is also of value to the dermatologist in the diagnosis of such infections as molluscum contagiosum (the virus cannot be cultivated in vitro) and orf, for which the appropriate cell cultures are not usually available. Routine examination of stools from any child with gastroenteritis should include not only techniques to detect pathogenic bacteria, but if an electronmicroscope is available attempts should be made to detect rotaviruses, since they are the commonest cause of viral gastroenteritis in children. Moreover, rotavirus antigens may be detected rapidly and almost as frequently in crude stool suspensions by counter-immunoelectro-osmophoresis (CIEOP) as by EM, while many more specimens may be examined during the course of a day by CIEOP than by EM.

Adenoviruses, some strains of which may fail to grow in cell cultures, have also been detected in faecal extracts by EM.

Although hepatitis A virus may be detected in stools of patients incubating this disease, EM is of limited value clinically because the virus can only rarely be detected once symptoms develop. EM cannot, of course, distinguish between antigenically distinct but morphologically identical viruses, unless the technique of immune-electron microscopy (IEM) is used—that is, detection of immune complexes after preincubation of specimens with virus-specific antisera. By this method it may be possible to define viruses which, because of their small size or their poorly defined structure, are difficult to visualise. Indeed, IEM has been of value in detecting such fastidious and small viruses as hepatitis A and the Norwalk agent, the latter being one of the viruses responsible for epidemics of acute gastroenteritis. However, IEM is more generally used for measuring immune responses, particularly when no suitable alternative method for detecting a serological response is available. A modification of the technique has also been used for rapid serotyping of enteroviruses. In addition, identification of viruses by EM in negatively stained preparations of fluid and cells from cultures exhibiting cytopathic effect may considerably shorten the time required to obtain a diagnosis.

Viral antigens may be detected by immunofluorescence (IF) in such specimens as nasopharyngeal secretions, brain tissue obtained by biopsy or post mortem, as well as from viral induced lesions of the skin and mucous membranes. However, in contrast with EM the technique is extremely sensitive, for very small amounts of viral antigen may be detected. Examination of brain by IF is the method of choice for the rapid diagnosis of such infections as herpes encephalitis (suitable virus may be present to be detected by EM) and rabies. With rabies it has recently been reported that antigen may be detected ante mortem in cutaneous nerve fibres in facial skin biopsy preparations and also, but less reliably, in corneal impression smears.

With the indirect IF test it is theoretically possible to detect viral antigens in the nasopharyngeal secretions of patients with infections caused by most viruses which are excreted via the nasopharynx. Although IF tests were first used for such purposes in the early 1960s, only recently has this technique been more widely used diagnostically. Antigens from such respiratory pathogens as influenza A and B, adenoviruses, and respiratory syncytial virus (RSV) have been detected within three to four hours of collecting specimens, and this technique may usefully complement conventional methods of virus isolation in cell cultures. In experienced hands, when specimens are taken in the acute phase of the disease, its sensitivity compares favourably with that of virus isolation. When specimens are obtained later, IF tests are more likely to be positive. Nevertheless, to achieve reproducible results, not only are high quality reagents of importance but particular care must be taken in the collection and processing of specimens. This is best done by the virologist himself or someone he personally instructed. This is true for most specimens to be examined by EM.

Rapid detection of viral antigens by IF in nasopharyngeal secretions is of value not only in the diagnosis and management of the patient himself but also in preventing cross-infection. For example, it has been shown that some susceptible contacts admitted to hospital with non-respiratory diseases during the winter may acquire respiratory syncytial virus infections while in hospital, a high proportion having lower respiratory tract infection. Such infections may be severe or even life-threatening in patients with congenital heart disease, CNS malformation, or cystic fibrosis. Infection may be transmitted by virus-excreting children and probably also by the ward staff, who generally have minor symptoms with transient virus excretion. Isolation of infants excreting RSV as well as other respiratory viral pathogens, and encouraging infected ward staff from handling potentially susceptible infants, might reduce cross-infection.

Although the diagnosis of measles can normally be made on clinical grounds alone, it may be more difficult in coloured children, in patients whose disease is modified by previous vaccination, and in patients with defective cell-mediated immune responses. Immunocompromised patients may develop severe disease complicated by a giant cell pneumonia or encephalopathy, though rash may be mild or even absent. A rapid virological diagnosis is also likely to be of particular value during the pre-eruptive phase, so that susceptible contacts may be protected by prompt measles vaccination, or, in the case of immunocompromised patients, by human immunoglobulin. Measles antigen may be detected by IF in ciliated epithelial cells as well as multinucleated giant cells present in the nasopharyngeal secretions. This technique provides a far more sensitive and reliable method of diagnosis than virus isolation in cell culture, which is unreliable and takes many days. Furthermore, virus can rarely be isolated more than 36 hours after onset of rash.

Virus excretion may be prolonged in immunocompromised patients—for example, those being treated with corticosteroids or cytotoxic drugs. Children with severe protein-calorie malnutrition may also have defective T-lymphocyte function as well as a poor and delayed secretory IgA response, which contributes towards the unusually severe forms of measles with high mortality rates which occur in many parts of the tropics. That prolonged virus excretion may also occur in this group of patients is suggested by the finding that malnourished children may excrete giant cells for periods ranging from 8 to 28 days. It would be of epidemiological value and add to greater understanding of the pathogenesis of measles virus infection in malnourished children if IF tests were able to confirm the presence and assess the duration of measles virus antigen in their nasopharyngeal secretions.

In no part of clinical virology has so much attention been focused on obtaining sensitive and rapid diagnosis as in the detection of HBsAg-associated infections. By radioimmunoassay a result can be given in 4-6 hours and by reverse passive haemagglutination, which is only slightly less sensitive, within 30 minutes. The application of such techniques to screening has not only resulted in a reduction in the incidence of post-transfusion hepatitis but has also played a major part in virtually eliminating the problem of hepatitis B virus infections from dialysis units in the United Kingdom.
Bleeding oesophageal varices

In cirrhotic patients bleeding from oesophageal varices is a critical event. About half of those admitted to hospital will die.1 When a cirrhotic patient is admitted with gastrointestinal bleeding, the precise diagnosis must be made by fibre-endoscopic examination because about one-third of patients are bleeding from lesions other than their varices.3

There are three main principles of management: (1) Adequate transfusion to replace blood loss. (2) Measures to minimise encephalopathy; purgation and neomycin are commonly used. (3) Efforts to control bleeding. The methods which are used to control bleeding vary from hospital to hospital. This variation is related to several factors—for example, availability of resources and the variation in the type of cirrhosis seen in different parts of the world. Variation between patients certainly makes comparison of the results obtained in different countries very difficult.

Temporary control of haemorrhage is nearly always possible with a modified Sengstaken tube, but it requires skilled nursing.5 Unfortunately bleeding again is common within a few days of the tube being deflated or removed, or both. The infusion of pitressin either systemically or regionally also causes temporary cessation of bleeding, but bleeding again is common when the treatment is stopped.6 Many different operations have been used to stop bleeding. Most of the patients in whom operative treatment is considered are the hard core who have bled repeatedly. They often have advanced cirrhosis. It seems reasonable (though unproved) to perform the least traumatic operation that will control bleeding. Perhaps the most attractive of these procedures is the direct injection of sclerosant solution into the varices through an endoscope; the published results are encouraging.7 The other operations entail either laparotomy or thoracotomy. They vary in complexity but all place considerable demands on the patients. The operations are aimed at obliterating or removing the varices. The long-term rate of further bleeding is high. A few surgeons favour emergency shunt operations despite the immediate high mortality rate,8 and one advantage of this policy is that any survivors have a long-term protection against further haemorrhage.

Whatever operative treatment is used the outcome largely depends on the severity of the patient's liver disease. For patients with jaundice, ascites, and encephalopathy gastrointestinal bleeding is usually an agonal symptom. The vital importance of good hepatic function is emphasised by the comparatively small risk to life in those patients with virtually normal livers who bleed from varices secondary to extrahepatic portal obstruction. In recent years there has been a reappraisal of the place of both elective and emergency surgery in portal hypertension. When shunt surgery was introduced over 30 years ago it was taken up enthusiastically. Any patient who survived a haemorrhage from oesophageal varices was usually advised to undergo a shunt operation to prevent further bleeding. It is only recently that this advice has been questioned. Recent trials show that, although shunt surgery may prevent further bleeding, it hastens the onset of liver failure. The net overall results show little advantage from elective operation.9

Opinion on the most effective method of controlling acute haemorrhage from oesophageal varices is at present confused. With the data available it is not possible to say that emergency surgery saves life: it may only alter the mode of death. The need for an adequate prospective controlled trial is obvious. Conservative treatment alone should be compared with various surgical procedures. Perhaps sclerotherapy or emergency transsection might be the first treatment to be tested.

Teaching of anatomy

Any surgeon may reasonably be expected to know the map of the territory he is about to enter before he is allowed to embark on a voyage of exploration within the human body. Indeed, one of the most unpleasant experiences in the operating theatre is to watch a man who has lost his way at the bottom of a deep dark hole. But it is not only the surgeon who needs to know the fabric of the human body: the neurologist, radiologist, and indeed every clinician apart from the psychotherapist employs anatomy in his everyday practice. It is alarming, therefore, that there is now real concern about the teaching of anatomy in Britain, reflected in a one-day conference held at the Royal College of Surgeons of England earlier this year, when both professional anatomists and surgeons discussed what is fast becoming a crisis.

Recent years have witnessed a progressive erosion of the time that our medical educators have assigned to anatomy in the undergraduate curriculum. But the revolt against the minutiae of anatomy, which once formed such a major part of preclinical teaching, seems merely to have resulted in the replacement of unnecessary topography by equally detailed biochemistry and subcellular anatomy—which probably have just as low an educational and vocational value as the finer points of the ossification of the sphenoid. In one new medical