"coping behaviour," the functions of which are, firstly, to protect the parent from overwhelming environmental and psychological stress and, secondly, to deal effectively with the medical and psychological care of the child.

Continuity of care is more difficult to achieve in Britain than in those countries where there are family paediatricians. In Britain the diagnosis is usually made in hospital and it is the paediatrician who first tells the parents. As there are so many others concerned in the subsequent treatment it is better if the paediatrician can assume the responsibility of being the sheet-anchor for the child and the parents until, in favourable cases, the family doctor can resume his care.

Chemoprophylaxis of Influenza

Four years ago W. L. Davies *et al.*[1] reported that amantadine, a simple synthetic drug, was effective against influenza A2 viruses in tissue cultures and in mice. Evidence that this drug has antiviral activity when administered prophylactically to man exposed to virus in epidemics or experimentally has been submitted to searching criticism by A. B. Sabin,[2] and he indicated that there is little solid evidence from clinical and laboratory observations that the compound prevents disease. It is therefore important that a new and thorough study of the drug in experimentally infected volunteers has now been reported.[3]

The volunteers were prisoners who were selected because they had no antibodies against the virus to be used. This virus, a 1965 strain of influenza A2, was shown to be highly susceptible to the drug in vitro. The virus was passed four times in tissue culture of human kidney cells, and 64,000 infectious doses of virus administered as drops or spray to the nasopharynx produced a febrile influenza-like disease, though not in all patients. The drug was given by mouth, 200 mg. daily, before and after the virus, and controls received placebo capsules. The virus infected all the volunteers, as judged by serological tests, but for some reason no virus was recovered. However, rises in antibody were smaller in the treated persons, and the illnesses were reduced in number and severity. Of 29 who received placebo 6 had a clinical illness with fever over 101° F. (38.3° C.), 7 had mild symptoms, 5 had questionable illness, and 11 had no illness at all. In the 29 treated persons 3 had mild and 5 questionable illnesses. These differences are statistically significant.

An almost identical trial was also performed with a new derivative of amantadine named rimantadine.[4] This at the same dosage had similar antiviral effects to amantadine; there was an illness rate of 86% in the control subjects and 26% in the treated. But it produced toxic effects—gastrointestinal disturbances in one volunteer, nightmares and possible hallucinations in a second, and acroparaesthesia and increasing anxiety in a third. In this trial virus was not isolated from the treated persons, whereas it was recovered from five of the untreated controls.

There is no doubt from these results that these two closely related compounds reduce symptoms and even prevent disease when a large dose of relatively virulent virus is administered to susceptible volunteers. But three questions remain. Is it possible in practice to give the compound in such a way that a reasonable number of people are protected by a reasonable amount of compound? Will a natural infection, initiated by a small amount of virus (which nevertheless might be less sensitive to amantadine than the strain used), also respond to chemoprophylaxis? Are the unwanted side-effects acceptable in practice? A prophylactic study by Finklea and colleagues against natural infection in a colony of mentally defective children appeared to answer these questions in the affirmative.[5] But this and other studies have been criticized.[2] Trials of amantadine in general practice have taken place in Britain, and the results will naturally be of great interest.

It seems that amantadine is not the only prospective anti-influenza drug. A recent paper[6] from the British Common Cold Research Unit describes studies carried out on volunteers with compound U.K.2371, an isoquinoline derivative developed and studied in the Pfizer Laboratories. The trials were broadly similar to those just described, except that volunteers with and without antibodies were inoculated. The virus was for most experiments passaged in eggs and partly attenuated, and was a recent influenza B strain. Illness and infection were not completely prevented, but the incidence was about halved. A similar effect was seen against an influenza A2 strain, but too few experiments were done for the results to be statistically significant. Nevertheless, it seems that a prophylactic effect in man has been detected, and this is the first drug to be shown to influence the course of type B infections. No unwanted effects of the drug were detected. These results should obviously be confirmed and extended and later field trials might be undertaken.

It should be emphasized that, though both these drugs are effective as prophylactics, there is no evidence that they can influence established infection. But, since vaccination fails to halt epidemics except in very small sections of the community, the possibility of drug treatment which could be applied more widely justifies further work.

Future of Postgraduate Education

The national convention of clinical tutors and area organizers which met on 11 July at the Royal College of Physicians was the first to be held under the auspices of the Conference of Postgraduate Medical Deans. It emphasized the great importance now being attached to the regional organization of postgraduate medical education, in view of the recommendations of the Royal Commission on Medical Education[1] that teaching and assessment should be carried out within the framework of a regional system. The inception of this regional organization can be traced back to 1945, when Sir Francis Fraser, the first director of the British Postgraduate Medical Federation, convinced provincial medical schools of the need to appoint postgraduate deans in their regions and called the first national conference of deans. The idea of appointing clinical tutors was approved by the conference of deans in 1961 and was further supported at the Christchurch

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