treatable cause of a wide variety of mental symptoms ranging from neurosis to psychosis and dementia. General paralysis devastated the French after the Napoleonic wars, and its syphilitic aetiology was slowly recognised as a result of the Wassermann reaction (1906) and the identification of *Treponema pallidum* in the brain by Noguchi and Moore (1913).[5] The meninges are thickened, the cortex is atrophic with perivascular lymphocytes, and microglial rod cells, in palisades, give a granular appearance to the ependyma and cortex. General paralysis starts insidiously 10 to 15 years after the primary infection, with fatigue, irritability, and forgetfulness. Depression, sexual excesses, and boastfulness supervene, with alcohol intolerance and defects of judgment heralding dementia. Motor signs follow: tremulous speech, a wavy tremor of the lips, transient hemiparesis, and later a spastic pyramidal paresis; impotence and loss of libido are the final ironies. Argyll Robertson pupils are present in most but not all patients and may appear late. Serological tests are positive in untreated patients, and a lymphocytosis (10 to 100×10^3/l) and raised protein concentrations (0·5 to 1·2 g/l) in the cerebrospinal fluid are invariable signs of infection of the central nervous system; a positive Lange curve is an outdated index of raised globulin and IgG concentrations, but a positive result to the VDRL test and specific antibodies may persist after treatment.

Differential diagnosis is not difficult provided that the possibility is borne in mind. Grandiose forms, simple dementia, depressive illness, and taboparesis are recognised presenting syndromes, but the earliest symptoms of neuroticism and irascibility, or of fits and "cerebral ischaemic episodes" may escape detection. Psychiatrists of the past picked out paranoid, neurasthenic, and acute organic pictures, so that virtually any psychiatric illness can be mimicked. Lishman's recommendation "that all patients admitted to psychiatric units should have serological tests carried out"[1] is sound, and needs emphasising when these eminently treatable syndromes are diminishing.

Diligent search will discover occasional patients with asymptomatic (latent) neurosyphilis—an abnormal cerebrospinal fluid in the absence of symptoms and signs. False-positive reactions need to be excluded by the more specific antibody tests for *T pallidum* and by raised cell and protein values. Untreated general paralysis of the insane is fatal within one to five years, and to be effective the treatment of all forms of neurosyphilis should be given early and in full doses (usually penicillin 1 megaunit daily, by intramuscular injection for 20 days[6]), and followed by further examinations of the cerebrospinal fluid for at least two years. Relapses need to be recognised, treated, and checked until neither the cell count nor the protein concentration in the cerebrospinal fluid is raised. Herxheimer reactions (fever, fits, and exacerbations of signs) occur in 5% of patients in the first few days. Penicillin sensitivity may be circumvented by treatment with tetracycline 2 g daily for 20 days or erythromycin, though the long-term efficacy of these drugs is less certain. Primary resistance of spirochaetes is still uncommon, but reports of persisting organisms[7] after apparently full courses of treatment make continued vigilance essential.

[1] Lishman WAL. *Organic psychiatry*. Oxford: Blackwell, 1978:388-406.
[2] Hoffman BF. Neurosyphilis in a young man. *Can J Psychiatry* 1981;**26**: 68-70.
[3] Hahn RD, Clark EG. Asymptomatic neurosyphilis: a review of the literature. *American Journal of Syphilis, Gonorrhea and Venereal Diseases* 1946;**30**:305-16.
[4] Elliott FA. *Clinical neurology*. Philadelphia: WB Saunders, 1971:316-8.
[5] Noguchi H, Moore JW. A demonstration of Treponema pallidum in the brain in cases of general paralysis. *J Exp Med* 1913;**17**:232-8.
[6] Csonka G. Venereal diseases. *Medicine (Oxford)* 1972;No 6:502-13.
[7] Anonymous. Persistence of treponemes after treatment of syphilis. *Lancet* 1965;i:693-4.

Pharmacists as doctors

The appetite of the British public for—and its ability to absorb—opinion and advice about medical matters could never fully be met by the resources available in general practice. Alternative sources include grannies, agony columnists, and publicans at one end of the range, with over-the-counter prescribing by pharmacists at the other.

Advice by pharmacists has perhaps for too long been assumed to lie outside the clinical, legal, and educational conventions of traditional medical practice. No one seems to know how much of pharmacists' interaction with their clients represents prescribing on the advice of the pharmacist as against the sale of preparations requested by the customer. What is clear is that the increasing professionalism and "professionalisation" of pharmacists have highlighted a series of awkward questions. If pharmacists are to develop their function as prescribers in the increasingly complex medical arena what training should they have in clinical medicine? Should—and can—guidelines for prescribing practice be laid down? Should clinical records be kept, because sooner or later actions taken by pharmacists are going to be questioned, with consequent risks of litigation? And which, if any, parts of prescribing can safely be delegated to less trained counter assistants? Answers to some of the questions were provided earlier this year when a substantial part of one issue of the *Pharmaceutical Journal*[1] was devoted to the report of a working party of the Council of the Pharmaceutical Society set up "to prepare guidance to be given in both undergraduate and postgraduate courses on the response to symptoms described in general practice."

On the positive side, the prescribing guidelines suggested in the report are both sensible and reassuring—as would have been expected from a broadly based working party that included respected representatives of the medical and pharmaceutical professions. Other welcome features were the importance placed by the report on the need for pharmacists to learn interviewing skills and to understand the importance of knowledge of local industries, illnesses, and idioms as well as to recognise that what patients complain of may be a remarkably misleading guide to their real problems. Courses for pharmacy students must, as the report implies, reflect their need to learn something of the general practitioner's skills in consulting with patients. Ideally, this learning ought to be based on tuition similar to what medical students (and in some areas nurses and social work students) increasingly receive in teaching general practices. This could be yet another sound reason for encouraging the growth of properly staffed and financed teaching practices.

At the same time as welcoming these initiatives by our pharmaceutical colleagues we should pause to ask ourselves as doctors whether some of the problems raised by the report have become problems because of the constraints and structures of modern general practice. Patients have more difficulty in seeing a general practitioner than some general practitioners like to think, and those who have most difficulty in coping with the system are often those who most need professional help. Probably unwittingly, the generally negative message of waiting room posters creates the feeling that doctors are there to see patients only when all else fails, but even the best booklets on self-care have to be supplemented by some professional opinion.

[1] Anonymous. Response to symptoms in general practice pharmacy. *Pharmaceutical Journal* 1981;**226**:14-8.