

group which acts as an oxygen-activating unit in cytochrome oxidase. Unfortunately this theory too falls foul of the facts, which have an unpleasant habit of invalidating all the theories about this disease as fast as they are put forward. As S. B. Osborn and J. M. Walshe¹¹ pointed out earlier this year, it is possible for a patient with Wilson's disease, treated with pencillamine, to live a perfectly normal life with no symptoms of disease and with no detectable copper or caeruloplasmin in his serum—always provided that the drug is continued and the patient maintained in copper balance. So this would suggest an excretory function for caeruloplasmin. But this theory comes up against the work of the Albert Einstein group of workers,¹² who have shown, at least for rabbits, that the copper of catabolized caeruloplasmin "is not directly or preferentially excreted by hepatic, pancreatic, intestinal, or renal routes." Blue blood may be all very well in preventing Wilson's disease, but the way in which it mediates this function is as obscure as its role in ennobling the nobility.

Obstructive Airways Disease

The clinical features of the bronchial and emphysematous types of obstructive airways disease have been defined by A. C. Dornhorst¹ and T. Simpson² and their physiological characteristics by C. Ogilvie³ and by W. A. Briscoe and A. Cournand.⁴ The careful and detailed studies of C. M. Fletcher, B. Burrows, and others^{5,6} firmly established the criteria whereby these two types can be distinguished. These workers have also tackled the semantic problem posed by the indiscriminate use of the terms "chronic bronchitis" and "emphysema," the first being favoured in Britain and the second in America. Using standardized clinical, radiographic, and physiological techniques, they compared 50 patients from a "bronchitis" clinic in London with 50 patients attending an "emphysema" clinic in Chicago.⁷ Apart from a rather greater incidence of disabling chest illness in London, there was no real difference in the pattern of obstructive airways disease for the two cities. In particular, the frequency of the bronchial and emphysematous forms was the same.

N. L. Jones, Burrows, and Fletcher⁸ have now extended this study by carrying out an annual review of the original 100 patients over a period of three years. During this time progress and mortality were remarkably similar in the two cities, but the incidence of disabling chest illness was higher among the London patients. However, a detailed questionnaire showed that bronchitic exacerbations were not in fact more frequent in London than in Chicago but only more disabling in terms of the time spent in bed or off work. The authors attribute this to differences in working conditions, sickness benefits, and cost of treatment between the two cities rather than to differences in the behaviour of the disease process itself.

This recent survey also gives valuable information on the

relative prognosis of the two types of obstructive airways disease. The mortality was higher in the bronchial (36%) than in the emphysematous group (15%), and this was related to the greater incidence of hypercapnia among the bronchitic patients. It might have been thought that the complications of bronchitis (infection, hypercapnia, and right heart failure) would prove more amenable to treatment than the irreversible lung changes of emphysema. The actual finding of a much higher death rate for bronchitis surely points to the need for a reappraisal of therapeutic methods used in this formidable disease. The thorough techniques of investigation evolved by Fletcher and his co-workers could well provide the basis for a study of this kind.

Realism and Addicts

The Ministry of Health is facing increasing criticism because of its alleged dilatoriness in responding effectively to the threat of epidemic heroin addiction in Britain. A brief inquiry published by the *Guardian*¹ last week certainly gives a picture more of disarray than preparedness so far as hospital services are concerned, while a speaker at a recent meeting of the General Medical Services Committee² denounced "a typical Ministry paper scheme," which he alleged was simply putting forward proposals which could not be implemented owing to lack of facilities. To what extent are such strictures justified?

The latest "paper scheme" is a memorandum dealing with the rehabilitation and aftercare of heroin addicts.³ The G.M.S. Committee has already drawn attention to the inappropriateness of the use of the allocation procedure to place an addict on a general practitioner's list, but otherwise the ideas put forward in this memorandum deserve nothing but praise. It presents a humane and intelligent approach to the problem of drug addiction, stressing that detoxification by itself is not enough, and picturing narcotic addiction as requiring comprehensive integrated services—clinics, hospitals, hostels, work-training—rather than mere drug-handout centres. The memorandum supplements the model for hospital treatment which was put forward earlier this year.⁴

The trouble comes when turning from the Ministry's memoranda to the realities. Those in Alexander Fleming House seem to have some of the characteristics of the kind of student who writes alpha papers but muffs the practicals. To take an example: one of the most important proposals in the new circular concerns the role of hostels in the after-care of addicts, and the benefits that can result from grouping patients are discussed with a degree of sympathy and insight which is admirable: "Although the establishment of a disciplined atmosphere is essential this alone is insufficient to prevent drug taking. It is necessary to build up an atmosphere of co-operation between staff and residents and in this task the psychiatrist can give valuable assistance. . . . The expectation of the hostel must not be set too high and staff must accept the probability that relapse will take place and be ready to contend with its effects on other residents and themselves." A splendid answer in a written paper, but then take the example further and look at the performance in the practicals.

¹ Dornhorst, A. C., *Lancet*, 1955, 1, 1185.

² Simpson, T., *Tubercle (Lond.)*, 1958, 39, 307.

³ Ogilvie, C., *Thorax*, 1959, 14, 113.

⁴ Briscoe, W. A., and Cournand, A., *Ciba Foundation Symposium on Pulmonary Structure and Function*, ed. A. V. S. de Reuck and M. O'Connor, 1962, p. 304. Boston.

⁵ Fletcher, C. M., Hugh-Jones, P., McNicol, M. W., and Pride, N. B., *Quart. J. Med.*, 1963, 32, 33.

⁶ Burrows, B., Fletcher, C. M., Heard, B. E., Jones, N. L., and Wootliff, J. S., *Lancet*, 1966, 1, 830.

⁷ Fletcher, C. M., Jones, N. L., Burrows, B., and Niden, A. H., *Amer. Rev. resp. Dis.*, 1964, 90, 1.

⁸ Jones, N. L., Burrows, B., and Fletcher, C. M., *Thorax*, 1967, 22, 327.

¹ *The Guardian*, 16 November 1967.

² *Brit. med. J. Suppl.*, 1967, 4, 47.

³ *Ministry of Health Memorandum*, H.M. (67) 83.

⁴ *Ibid.*, H.M. (67) 16.

⁵ *Brit. med. J.*, 1967, 3, 692.

⁶ *Ibid.*, 1967, 4, 366.