

we are apt to dissipate our energies in the pursuit of expediency, to remedy immediate symptoms, and to disregard the simple fundamental causes. Of what use all our wonderful drugs against tuberculosis when the solution of the overcrowding problem and that of the already infected and his isolation would do infinitely more good?

Industrial diseases are bound to increase with the development of methods that make use of more noxious and irritant substances, and what of radioactivity and its effect on man? I can quite imagine the poor medical student of the future almost impotent trying to cope with textbooks on radioactive diseases, dermatoses, and volumes and volumes on neurosis. And all this monumental knowledge for what? Of what eventual benefit to mankind? What, after all, is the purpose in life? Are we not taking the wrong turning and forgetting the need to "become as little children"?—I am, etc.,

Barkingside, Essex.

J. PAYAN.

Emphysema

SIR,—In an otherwise excellent article Dr. A. G. W. Whitfield (December 6, p. 1227) reviews the radiological diagnosis of emphysema and states that the radiological appearances should be widely known and clearly defined. Thereafter he reiterates some of the older textbook inaccuracies. It is true, as he says, that "the most reliable radiological sign of emphysema is depression, flattening, and restricted respiratory excursion of the diaphragm" (*vide* Ministry of Health Report *Standardization of Radiological Terminology in Pulmonary Disease*, H.M.S.O., 1952), but this sign may be absent unless the emphysema is either extensive or confined to the lower lobes. Dr. Whitfield affirms that "hypertranslucency of the lung fields is valuable evidence of emphysema. . . ." Hypertranslucency is a trap for the unwary, and by itself can rarely be taken as evidence of emphysema. A new term introduced by the author is that of "increased brilliance of the lung bases." Like all new terms it should be defined: its meaning is obscure, and all that can be gleaned from the context is that it does not mean the same thing as "hypertranslucency."

Dr. Whitfield repeats the old heresy that the heart is small, or "drop-like," in emphysema. Without reference to the body type such a statement is both meaningless and inaccurate. He omits to mention what is probably the second most reliable sign of emphysema—namely, the attenuation of the vascular pattern (see Westermarck, N., 1948, *Roentgen Studies of the Lungs and Heart*, Minnesota). The most extraordinary statement in the article, however, is that "bullae and cysts . . . tend to obscure the diagnostic issue by suggesting the possibility of a tuberculous infection." If this is to be taken to mean that there is a statistically significant coexistence of lung cysts and pulmonary tuberculosis, then it would be interesting to have the pertinent references.

Emphysema presents a difficult radiological problem, and Dr. Whitfield has not entirely satisfied his own plea for clear definition of the radiological appearances.—I am, etc.,

Sheffield, 10.

THOMAS LODGE.

SIR,—I must correct the misrepresentation of my views on the use of ephedrine in emphysema given by Dr. A. G. W. Whitfield (December 6, p. 1227). I use larger doses than those advocated by Whitfield only in patients in whom they do not produce distressing side-effects. In fact, the largest dose which is tolerated by the individual patient without side-effects should be used, and I can recommend this procedure to all who are able to free themselves from the common yardstick of ephedrine $\frac{1}{2}$ –1 gr. (32–65 mg.). I am restricting my remarks to this point only with regard to the value of your space.—I am, etc.,

London, W.C.1.

H. HERXHEIMER.

SIR,—I read Dr. A. G. W. Whitfield's paper on emphysema (December 6, p. 1227) with special interest, as I had, by request, just written an elementary paper on the subject for some industrial nurses. My one point of criticism is of

his statement (p. 1231) that "expectorants . . . should have virtually disappeared from hospital therapeutic practice, and are probably of no value in the treatment of respiratory disease." If he had said that pharmacologists cannot find any reason for their value I might have been more willing to agree, though tolu at least has been proved to have some effect on bronchial secretion, but there must be few adults in this country who have not had reason at some time or other to appreciate the relief in cases of cough which can be given by mixtures containing ipecacuanha, ammonium carbonate, squills, tolu, or, before it became so expensive, senega. Whether they cure is a different matter, but no careful general practitioner can doubt that in suitable doses they ease the patient considerably. And no pharmacologist that I know of can explain the soothing effect on the cough reflex at night of troch. ipecac. et morph. A few lines further on, Dr. Whitfield rightly stresses the danger of morphine in status asthmaticus, etc., but he might also have said that in general practice it is at times the most valuable drug we have for these conditions. Morphine is not simply a powerful respiratory depressant. It greatly reduces anxiety, distress, and the demands of tissues for oxygen, all of which play a part in these conditions. We have to look at the whole man and not simply one particular function. What is wanted is not wholesale condemnation of expectorants or of morphine, but a recognition of when they are safe and useful and when they are not.

I was much interested in his spirometry, but this is not easy to apply in practice. I have the feeling that, though holding of the breath is a complex phenomenon, it is, by and large, a pretty good indication of the respiratory reserve, and I always look on a man who cannot hold his breath for long as one unfit for heavy work. The fact that it depends to some extent also on the patient's will-power makes it perhaps a more reliable guide industrially than scientifically. Am I right? Such a simple clinical test could be most valuable.

I would like to stress that emphysema is not simply, as Dr. Whitfield rightly calls it, "essentially degenerative" but also destructive. There is hope that with increasing knowledge of organizers, etc., we may in time be able to reverse processes which at present seem irreversible—as, for instance, the effect of an extract of fish lens protein on cataract, mentioned in the *Practitioner* (December, 1952, p. 587). But in emphysema we can never hope that the alveoli, when once ruptured, can be re-formed. The lost oxygenating power has gone for good; and probably, when once the process has started, numbers of alveoli are ruptured every time the patient coughs. It is this which makes early and effective treatment so important, as Dr. Whitfield states, but it also means that we should do everything we can to prevent or lessen the amount or vigour of coughing, and it is here where his despised "expectorants" can be so valuable, even in hospital.

Finally, I was delighted to notice how Dr. Whitfield stressed the progressive diminution of exercise tolerance. It is of the utmost importance in industry to recognize that in these patients every sickness absence due to bronchitis, etc., means a permanent diminution of the man's capacity for work. In fact, though rheumatic complaints cause an enormous loss to industry, possibly more men have to retire from work prematurely owing to emphysema and its pseudonyms or sequelae (silicosis, etc., bronchitis, asthma, myocarditis) than from any other cause. I hope Dr. Whitfield's paper will stimulate interest, recognition, and research.—I am, etc.,

Winsford, Cheshire.

W. N. LEAK.

Chemotherapy of Leprosy

SIR,—May I refer to the statement of Dr. R. G. Cochrane (December 6, p. 1220) in which he gives the primary credit for the improvement in the treatment of leprosy in the last three or four decades to Mercado (1914) and to Heiser (1914), and does me less than justice by only mentioning my fourth, and least important, paper of 1921 on my method of injecting soluble products of *hydnocarpus* (*chaulmoogra*) oil, made for me in Calcutta, and thus used, I believe, for the first time? The true facts are concisely recorded in my address published in your *Journal* (1946),¹ and very fully in my Cameron Prize lecture (1930),² with 88 references, includ-