

There is a danger of carrying the grades too far. It must never be forgotten that *rest* is the basis of treatment and that the system of graduated exercises cannot be beneficial unless the body has the power to resist the toxins produced by the lesion, and that this power is only obtained by definite periods of rest throughout the treatment at the sanatorium.

THE ADVANTAGES OF TREATMENT BY AUTO-INOCULATION.

The advantages of treatment by Auto-inoculation are, firstly, that one is employing a natural method to effect an arrest of the disease and the results from treatment by nature are generally superior to artificial means.

Secondly, it produces a definite element of hope in the patient who finds he can work and has the prospect of doing really hard work and probably returning to his trade or occupation, and, thirdly, it removes the possibility of the patient becoming a chronic overfed invalid, introspective and unwilling to work on any account; and, lastly, it forms a basis on which special forms of treatment can be superimposed and administered conjointly. In fact, graduated exercises should be prescribed, at suitable times, to all cases of pulmonary tuberculosis, no matter what other special treatment is being given.

DISADVANTAGES.

It should be remembered that some patients cannot go through all the grades and it is important to know when the limit of the treatment is reached. Useful information is obtained from the patient's weight, which should slowly increase through the earlier grades, and at no time decrease. Periodic exercise tests and records of the sedimentation rate, along with careful examination of the physical signs, will prevent errors being made by giving too much exercise to unsuitable cases.

The patient's condition has to be watched carefully and constantly. No piece of clinical information about the patient can be neglected, for the controls of temperature and pulse are still very rough, and may be misleading. The treatment is good but cannot be pushed too far, and must be controlled by constant observation.

In order to make the work more interesting at many sanatoria, a series of occupations, such as basket making, leather work, furniture repairing, have been established and the patients are employed in graduated employment in the workshops. The work is certainly more interesting but it is no longer treatment by auto-inoculation. The only therapeutic value is that the patient is kept interested and occupied, and therefore, although it is good psychological treatment, it is certainly not auto-inoculation.

One class of patient is eminently suitable for this occupational therapy, and that is the bronchitic. He cannot go through the grades or even walks, on account of his shortness of breath, also he is very uncomfortable in the cold winds. These patients do excellently when given work of a suitable nature in well-fitted workshops.

From the workshop in the sanatorium we pass on to the development of the Tuberculosis Colony. Here the patient should be of the type that will derive permanent benefit from treatment, and when the disease is quiescent and tending towards arrest he can be employed under ideal conditions and earn a wage by producing good saleable goods. The greatest care must be given when selecting cases for this treatment, as it will quickly destroy the economic stability of a colony if its working becomes clogged with cases requiring sanatorium treatment which necessitates absence from daily work.

Theoretically, the tuberculosis colony is ideal, but practically many difficulties arise, both from financial and administrative problems.

Now treatment by auto-inoculation aims at controlling the toxæmia. There is still the other characteristic of the disease to be considered, namely, the symptoms arising from the pathological condition of the lung.

These symptoms are chiefly cough, dyspnoea, hæmoptysis, night sweats, malaise, dyspepsia or indigestion and insomnia. Pleurisy, laryngitis, enteritis, I would prefer to consider under complications of the disease.

Let us consider the symptoms individually. Firstly, *Cough*, the commonest symptom of all.

Its treatment will depend on its nature. Generally speaking from the point of view of treatment, there are five types of cough:—

- (1) The useless cough.
- (2) The cough which is necessary to bring up expectoration.
- (3) The cough with vomiting generally due to nasal adhesion.
- (4) The cough of fibroid disease.
- (5) The bronchitic cough.

The first one of these is due to irritation of the larynx or trachea, and the longer it is allowed to persist the greater will be the irritation of the trachea and larynx. It, therefore, should be suppressed as much as possible by the patient's will and relieved by a mildly sedative cough mixture. There are dozens of sedative cough mixtures, most of them contain compound tincture of camphor, oxymel of squill or syrup of Tulu, and maybe a little chloroform. In addition a respirator is often effective with drops of cinnamon or pine.

Smoking should be forbidden and an occasional lozenge is useful.

The cough with expectoration calls for different treatment. Here the cough is of definite use and although the patient should be warned not to cough unnecessarily sedatives should be avoided. The lungs must be cleared of sputum and the medicines should be of an expectorant nature, which will help the sputum to come up easily.

The third type of cough which is due to nasal adhesions is often most distressing and generally causes vomiting. Here a definitely sedative mixture is desirable, particularly at night, when heroin may have to be given to allow the patient to obtain rest. In persistent cases the need for phrenic evulsion must be considered.

Then we have the cough of the patient whose lungs are heavily infiltrated with fibrous tissue. He generally has a most irritable cough which can only be controlled by sedatives. Sometimes steam inhalations are of benefit, and if the disease is more or less unilateral, tight strapping of the side most affected will often give relief.

Lastly we have the cough of the case complicated by bronchitis. Here steam inhalations are of definite use. It is important to keep the sputum loose. Many cases do very well on Potassium Iodide and even better on Tincture of Iodine taken in milk. External applications of camphorated oil and even poultices of antiphlogistine can give considerable relief.

The next symptom I wish to consider is *Dyspnoea*. In the toxic type of case this can be due to the toxæmia, and will disappear as the disease comes under control. In the advanced cases it can be brought on by a number of conditions acting independently or conjointly. The fundamental cause is the inefficient gaseous interchange in the alveoli which may be due to fibrosis and emphysema or to cardiac trouble. Sometimes the symptom is spasmodic and at other times continuous, but however it occurs it is distressing for the patient.

I think the best relief is obtained from oxygen, particularly if it is administered under pressure. Even compressed air has a remarkable effect, but, unfortunately, like oxygen, it is only transitory.

[previous page](#)

[next page](#)