

dreamed that in this way he would be able to attack the tubercle bacillus *in situ*. The method had an extensive trial, and many reported favorably as to its effects; but experience failed to prove that any lasting benefit resulted, and it has fallen entirely into disuse.

Mineral waters containing sulphur, like those containing arsenic, have been highly recommended in the treatment of tuberculosis; but although the waters of Les Eaux Bonnes are in high repute in France for this purpose, the waters of Harrogate and Strathpeffer are not much resorted to by tuberculosis patients in this country.

Hypophosphites of lime, soda, etc., are often given, but there is little evidence that they have any special action. A largely used proprietary preparation which contains small doses of the hypophosphites probably owes most of its popularity to its palatability and the persistent advertising which keeps its name constantly before the public and the medical profession.

Quinine and Strychnine or *nux vomica* are useful tonics, and are often given in combination with other remedies, as in the well-known Easton's syrup.

Nuclein and the so-called nucleinic acid prepared from yeast have received a good deal of attention in America. Sixty to eighty minims of a 1 per cent. solution of nucleinic acid are administered by hypodermic injection daily, and the same preparation has been given by the mouth in larger doses. Vaughan and others who have used it largely have published some very favorable results. A recent method of treatment associated with the name of a French physician, and alleged to be equally efficacious in cancer and in tubercle, appears to be nothing more or less than treatment with nuclein.

It is impossible to refer to all the drugs which have been used in the treatment of phthisis. Oil of cloves, oil of cinnamon, oil of peppermint, ichthyol, garlic and cinnamic acid are a few of those which have recently enjoyed a measure of support. The oils of cloves, cinnamon, and peppermint may be given in the form of capsules in doses of 5 to 30 minims, or they may be dropped on the sponge of an oro-nasal inhaler and used as inhalations. Ichthyol, a bituminous sub-

stance containing a large amount of sulphur, on which its efficacy probably depends, is given in doses of 20 to 60 grains a day, preferably in the form of keratin-coated pills, the outer covering of which will not dissolve until the intestine is reached. Garlic may be given in the form of powder, in capsules, in doses of 3 to 10 grains, or in the form of the *syrupus allii* (U.S.P.), in doses of 1 to 4 drachms.

Cinnamic acid has been recommended by Heusser as innocuous, and although not a specific, as capable of curing a considerable number of cases of tuberculosis. It is employed in the form of a 5 per cent. emulsion, of which  $1\frac{1}{2}$  minims or more are given by subcutaneous injection in the gluteal region, the maximum dose being 15 minims.

We may conclude with a few remarks on the medical treatment of various complications of pulmonary or other forms of tuberculosis.

(1) *Fever*. Extended investigations have been made as to the effect of all the well-known antipyretic drugs in reducing fever in tuberculosis. Neither antipyrin, phenacetin, acetanilide, quinine, nor other similar drug, appears to have any permanently beneficial effect on the course of the temperature, while with general treatment a subsidence of fever will often follow.

(2) *Fever* is often accompanied by a troublesome symptom—namely, *sweating at night*. In such cases the temperature and ventilation of the bedroom and the amount of the bedclothes must be regulated. When profuse perspiration occur, changing the night-dress, rubbing the patient down with a dry towel, and the administration of some food and stimulant, are useful measures to employ.

There are various remedies which are more or less successful in checking night sweats. Oxide of zinc in doses of 5 grains in pill form, half a grain of the extract or 15 minims of the tincture of belladonna (B. P. 1885), 1-100 gr. of atropine, half a grain of extract of *nux vomica*, 1-20 gr. of strychnine 1-12 gr. of agaricin, 1-60 gr. of picrotoxin, and 20 grains of camphoric acid, are among the remedies that have been found useful. They may be given either singly or in combination. I generally commence with oxide