

was observable with the change of treatment; a similar effect and equal benefit seemed to follow each of the remedies, and if the title of "specific" were due to the hypophosphite, it was equally deserved by the carbonate of soda and the steel. This was, in fact, a simple case of consumption, the type of hundreds of others, in which the most simple treatment is the most successful, and in which rest and improved diet, with proper hygiene, are the chief agents for good. In the remainder of these cases the general results were the same as in those I have detailed, the phosphatic salt invariably exhibiting itself as a simple, unirritating substance, adapted like many other simple alkaline salts, to certain varieties of consumption, but having not even the shadow of a claim to anything like "specific" influence upon tubercular disease.

22. *Action of Phosphoric Acid upon Phthisis.* By R. P. COTTON, M.D.—Phosphoric acid has been so long and successfully used as a tonic and antiseptic, especially in cases of depressed nervous power, that some good result might reasonably be expected from its administration in many cases of phthisis. With a view of testing its influence, I prescribed it, as in my previous experiments, in twenty-five cases of chronic and uncomplicated consumption, and carefully noted the results. Of these twenty-five cases, twelve were in the first stage, four in the second, and nine in the third stage of the disease. Fifteen were males and ten females.

Three patients experienced great improvement whilst taking the phosphoric acid, eight improved a little, and fourteen of the cases seemed either to derive no benefit or to become worse. None of them increased materially in weight, the greatest increase not exceeding two pounds, except in one instance, where seven pounds were gained, but in this case it was afterwards found that cod-liver oil had been taken in addition to the phosphoric acid.

Two of the greatly improved cases were in the third stage of the disease, and it was generally observed that most of the improved were either in an advanced condition of disease or belonged unmistakably to what is commonly understood as the cachectic class, leading to the conclusion that the phosphoric acid acted simply in virtue of its general tonic and upholding influences, and not from any specific action upon the tubercular disease.

It was prescribed in doses of fifteen minims of the Acidum Phosphoricum dilutum of the London Pharmacopœia, in a little water two or three times a day. As a general rule it agreed very well with the patients, improving the appetite and diminishing undue secretion, whether from the skin or mucous membranes. In four cases, however, it was discontinued, seeming to produce griping pains in the bowels, together with nausea and diminished appetite.

In estimating its effects, even in the most satisfactory cases, it appeared to me that the improvement was inconsiderable in comparison with what had previously been noticed in some other remedies; whilst several of the patients who either improved very slightly or doubtfully under the phosphoric acid, improved afterwards under other treatment. Four of the patients improved greatly in health when steel wine was taken in conjunction with the acid, the latter being given twice a day, and the former immediately after dinner. It will be remembered that a combination of steel wine with quinine was formerly found to be productive of good in a considerable number of cases (*Medical Times and Gazette*, August 30, 1862).

Upon the whole, I confess to having been disappointed in the action of phosphoric acid taken singly. In some cases, however, where it has been prescribed either with other tonics or in chemical combination with iron, I have found it of great use in the treatment of phthisis.

From these observations I have arrived at the following conclusions: 1. That the dilute phosphoric acid acts beneficially as a tonic in certain consumptive cases; but that, as a general rule, it is inferior to some of the other mineral acids. 2. That when taken in conjunction with iron its good effects appear to be considerably enhanced.—*Medical Times and Gazette*, May 30th, 1863.

23. *Therapeutical Value of Cod-liver Oil in Chronic Convulsive Diseases.*—Dr. AXSTIE read a paper on this subject before the Western Medical and Sur-