

tonsil, and then we have the peritonsillitis of some authors; it may express itself in the superficial parts, and become the erythematous tonsillitis of others; it may be deep seated, involving the parenchyma, and we have the parenchymatous tonsillitis, or the true quinsy of the older writers; and again, the brunt of the inflammation may be confined to the lacunæ, and then the disease is called folliculous tonsillitis. Now, in our opinion, this is the same inflammation, modified according to the constitutional state of the patient, the kind and severity of the exposure, and so on. As an illustration, it has been observed that the variety of tonsillitis called parenchymatous, occurs with great frequency in rheumatic subjects, and treatment followed in recognition of this fact—as the exhibition of the salicylates, salol, etc.,—has resulted in prompt relief. Other instances could be cited in proof of this position, but it would carry us too far from the immediate purpose of this paper. The question before us is, how to treat a case of simple tonsillitis, by which is meant, one uncomplicated by any other disease, and uninfluenced by the presence of any diathesis. Such cases are not rare, and, in our opinion, can be greatly modified in their duration and severity by proper treatment.

We have to deal with a sthenic inflammation—one that develops very rapidly, and continues at a great height for some days. The plain indication, then, is to control the production of this heat, to so influence the nerve centers as to make a high temperature impossible. This is done by the exhibition of antipyretics. So much for the general treatment. The next indication is to relieve the local distress. When the mucous membrane of the mouth and throat is inflamed, the secretion therefrom is highly acid. This acid secretion acts, in time, as an irritant, and keeps up the local disturbance. The indication is to apply alkalies to the surface of the tonsil, to neutralize the acidity of the secretions, and relieve the inflamed surface of this great source of irritation.

This is the general plan proposed; the details of its application are as follows:

The doses given are for adults, for the reason that we then have a definite standard to go by, which can be modified to meet the age of each individual case.

First, to keep down the temperature:

The various antipyretics may be used according to personal choice, but we have come to rely principally upon antifebrin. This is to be given in five grain doses every hour until the temperature falls to nearly normal, and then at intervals necessary to prevent it rising again. We have never been obliged to give more than three doses in order to accomplish the first indication, generally two doses have been sufficient. In children, the minimum dose according to age should be given, and the patient carefully watched. Occasionally, it will be found to have a depressant effect, and must be abandoned for one of the other antipyretics.

The local treatment can be applied in several ways. Bicarbonate of sodium can be dusted upon the tonsils by means of an ordinary powder-blower, or a solution, ten grains to the ounce of water, can be sprayed on the parts by means of an atomizer, or, where the patient is of sufficient age, he can be instructed to dip the finger into the powder and touch the surface of the tonsil with it, or he can hold the solution in the mouth, allowing it to bathe the parts for a few moments. This local treatment should be used frequently, say at intervals of an hour, during the day.

Our notes show that, with this plan of treatment, four cases of severe tonsillitis, seen within the last few months, were limited to two days each. On the third day, there remained simply the general malaise, which is apt to follow cases of this kind. The temperature of these cases, when first seen by the writer, ranges from  $102^{\circ}$  to  $104^{\circ}$  F.

Professional friends, to whom this treatment was suggested, have reported equally good results. It is not necessary to report these cases in detail, but we content ourselves by formulating the conclusions of this paper as follows:

I. When an inflammation attacks the tonsil, it is greatly influenced in its course by the presence of any diathesis.

II. The treatment must be so arranged as to meet and counteract the influence of this diathesis.

III. In all cases, simple as well as complicated, the general indications are to keep down the temperature and to relieve the local irritation.

IV. The first indication can be met by the exhibition of antifebrin in proper doses; the second by the frequent application of bicarbonate of sodium, either in powder or in solution, to the surface of the tonsil.

V. This plan, properly followed, will generally limit the disease from one to three days.

## HYPODERMIC USE OF NITROGLYCERINE IN HEART FAILURE.

By M. HOWARD FUSSELL, M.D., Philadelphia.

The results of the hypodermic use of two drops of a one per cent. solution of nitro-glycerine, in the following cases of heart failure, were so satisfactory that it seems a matter of importance to the writer to place them on record.

*Case 1.*—Mrs. G., aged 63, subject to dyspnoea, palpitation and recurring oedema for several years, had a slight cerebral hemorrhage two years ago. Examination at that time showed disease of the mitral valve. Under treatment with digitalis and strophanthus, the case progressed favorably until January, 1888. Suddenly on the night of January 2, the patient, after having passed an unusually good day on the first, was seized with urgent dyspnoea, so that she was unable to lie down, and she became so sick that I was summoned about 3 o'clock in the morning. I found the patient unconscious, both her lungs full of bubbling râles,