

## BELLEVUE HOSPITAL, NEW YORK.

## NOTES OF TREATMENT AND PECULIARITIES IN PRACTICE.

## THE TREATMENT OF TYPHOID FEVER.

In looking over the records of cases of typhoid fever in Bellevue Hospital, the wide variety of treatment is quite noticeable. Even in the past eight years the gamut of therapeutics has been quite well run through, reaching from ninety grains of quinine a day and baths every hour to simple expectancy with milk and egg diet. Considering the class of cases, the results have been satisfactory as regards final cure, and seem to show this at least very clearly, that the system in typhoid fever is quite tolerant of tentative therapeutics.

As the treatment of this disease, so far as active measures are concerned, is still far from being settled, some examination of the cases at Bellevue may not be uninteresting.

The patients are chiefly laborers and domestics, and have been healthy and hard-working persons. Most of them are found to have been living in poorly ventilated, crowded tenement houses, and they often give a history of there being stinking sewers or water-closets, or bad smells in the vicinity. Very rarely another case of typhoid fever has been in the same house or family. Sometimes the disease has originated in the hospital. In one case the patient had been lying in a bed by the entrance to the water-closet. In another she had been for over a week in the cells for female alcoholic, hysterical, and insane patients. The cases are brought in, or often walk in, at about the sixth or seventh day of the disease. They have been trying to keep at their work, and have been living on ordinary diet.

They are put to bed, and papules appear on the next day. Within the last two or three years the only precaution taken against contagion is to disinfect the stools. This is done generally with sulphate of iron, which is placed in the bed-pan previous to its being used. Commercial muriatic acid diluted is poured into the pan after the passage. The stools being disinfected, no further attempts at protecting the house-staff, nurses, or other patients are employed. The old idea that there is infection and danger in the patient's breath is disregarded, if at all believed in. The house physicians examine the lungs for evidences of pneumonia or bronchitis several times a week, they bend over the patients in examining the tongue and abdomen, and must inevitably inspire some of the patient's exhalations. No case of typhoid fever has occurred among the staff for several years.

The class of cases is in no respect unique as regard symptoms. There are mild and severe forms: there are obstinate diarrhoeas; there is uniform constipation; delirium so wild as to

oblige transfer from the wards; temperatures running to 106° and 107° or keeping as low as 102° and 103°. It is not often that the initial temperatures can be obtained. In cases where they have been, there has been no such characteristic rising as is described by Wunderlich and the German observers, though there is often a gradual rise in the first week.

The treatment at present in vogue is that of quinine and baths. This was begun four or five years ago, and has received such favor that it is quite the routine now. The quinine is given differently. Perhaps the most popular way has been ten grains two or three times a day, the evening dose being doubled if the temperature rises above a particular height, say 105°. It sometimes causes gastric irritation, being given in powder form. If it is vomited, pills are tried, and finally double doses by rectum. Quinidia was used for a short time, and it reduced temperature like quinine, but irritated the stomach more. Baths in every shape are used, but the sponge-bath is the form most adopted. The patient's temperature is taken; if found above a certain height, he is stripped either entirely naked, or perhaps only the upper half of the body. He is then sponged over with water at a temperature of from 60° to 80°. If only half the body is uncovered at a time, that part is allowed to dry, and it is then covered and the rest of the surface sponged. This process is kept up for fifteen minutes. If that is insufficient to reduce the temperature, it is prolonged to half an hour. It is repeated every one, two, or three hours, according to the result obtained. At the end of the bath a little whiskey is generally given.

The effect of the quinine on the temperature is to reduce it slightly in a considerable number of cases. Its effect on the patient is to produce nausea, and vomiting in a smaller number. Its effect on the disease we will consider later.

The sponge-baths are almost always pleasant to the patient, if not too frequently repeated. If given every hour, or two hours even, they seem to weary and annoy him. They certainly reduce the temperature in most of the cases. In a small number of these the reduction seems to last for many hours. Sometimes two or three baths given in the afternoon and evening reduce the fever two or three degrees, and it keeps down for twelve hours. But it is not very rare that the baths are given every hour even, without producing very marked effect. The sponge-bath is a much more efficient antipyretic than quinine. The wet pack is hardly used now. In one case where it was employed pneumonia complicated the disease. The plan of placing the patient in water at a temperature of 98°, and then gradually lowering it, has been tried a number of times, and so far no deaths can be traced to it. In this respect