

the effects of the septic poison in the blood, (2) to act as a good tonic to the muscular and nervous systems, (3) to tend to check febrile action, and (4) to remove any malarial element that happens to be present. Quinia is never given in the enormous doses advised by the German physicians. It has been found that such doses will break down high fever, but they produce entirely unnecessary irritation of the gastric mucous membrane. About twelve grains of quinia are given in the course of the twenty-four hours.

The temperature is kept down by preventive measures rather than by the cold bath, which is regarded as a last resort. It is unnecessary after this to say that the practice of the University Hospital is wholly opposed to the indiscriminate cold bathing in typhoid fever, so much in vogue in Germany within a year past.

When the temperature runs up in spite of drugs, —in the milder cases, spongings of the whole body are practised every two hours, the sponges being squeezed out of a mixture of water and bay rum at a temperature of from 60° to 80°. If this does not succeed (it rarely fails), and if the patient's temperature mounts up to 104° or 105°, he is then wrapped up in sheets wrung out of cold water. If the temperature still runs up to such an extent that life is threatened, the patient is placed in a cool bath until the bodily temperature is sufficiently reduced.

Before the local lesions appear, the fever can be more boldly attacked; but when, in subsequent stages, it runs high, it is regarded as partaking of the nature of a sympathetic fever, largely dependent upon the amount of intestinal lesion, and the use of baths at this period is thought to be attended with great risk. If the cold bath is used at all (except as a last resort, and when temperature cannot be reduced in any other way), it is employed during the first ten days in cases where the temperature rises above 103° and cannot be controlled by frequent spongings, large doses of quinia, diaphoretics, etc.

With regard to the use of stimulants, the hospital practice is not in favor of administering them simply because a patient has the fever. It is believed that stimulants are only demanded for the relief of certain symptoms. As a general thing, they are not given to children before the age of puberty. They are only administered to old persons, and to meet certain indications, viz., (1) ataxic nervous disturbances, such as sleeplessness, twitchings of the muscles, maniacal delirium: (2) circulatory disturbances, such as feeble and rapid pulse, and feeble development of the first sound of the heart; (3) profound asthenia, as shown by great tremulousness, inability to make any movement, and tendency to slide down off the pillow; (4) dry and brown tongue, with sordes on lips, teeth, and tongue.

The milder forms of stimulus are always used at first. The one most frequently employed is wine-*whewy*. This is made in the proportion of one part of sherry to three of milk, and as much as a gill or half a pint of it is given in the course of three hours. If the symptoms increase, stronger stimulants are used, such as whiskey. Whiskey is usually given in lime-water and milk; the lime water prevents the coagulation of the milk by the alcohol. These ingredients are mixed in the proportion of one tablespoonful each of whiskey and lime-water to every three ounces of milk. In this form half an ounce of whiskey is given every hour. If the stimulation is doing good, a diminution of the serious symptoms is noted. If the symptoms increase, on the other hand, the amount of stimulus is reduced.

With regard to complications: relapses are always regarded as true second attacks of the disease, and are treated accordingly. The treatment is resumed, the diet restricted, and the same general watchfulness had over the state of the case as during the course of the first attack.

Hemorrhage occurring early in the attack is considered as of but little consequence, but when it supervenes later—when the sloughs are thrown off—it is regarded as a very serious matter. The treatment of hemorrhage is by absolute rest in bed for twenty-four hours, and by the administration of opium, to produce complete quiet for the alimentary canal. The opium is given by the rectum, one grain of the solid opium being prescribed every two or three hours until the patient is gently under its influence; of astringents, for local action, acetate of lead is preferred. A suppository containing one grain of opium and three grains of the acetate of lead is given three or four times daily. Ergot, by reason of its action upon the walls of the arterioles, is also very highly prized. It is given hypodermically near the supposed seat of the hemorrhage. The food allowed is very small in quantity, and absolutely liquid.

Peritonitis is treated by antiphlogistics, sedatives, perfect rest in bed, and a diet which leaves no residuum to irritate the bowels.

True perforation is regarded as beyond the reach of medical skill to mend.

THE GERMAN HOSPITAL.

The quinine treatment (heroic doses) has been given a fair trial in the wards, and has been found to do but very little, if any, good. It has not even been satisfactorily demonstrated that it reduces the temperature, as the same changes in temperature have taken place in the case of those who have been taking the mineral acids alone. Indeed, after giving quinia some time in some cases it was stopped, and the same changes were found to exist. Quinia has seemed rather to increase the diarrhoea and headache, and in two cases it produced entire