

use so long as I can produce good results with the *veratrum viride*. While this remedy has been used on an enormous scale in many acute diseases throughout the southern parts of our country, the number of cases of poisoning by it have been exceedingly rare. It is, then, a remedy that can be used with safety. It may produce unpleasant effects, such as prostration and diarrhea, but when it does these symptoms are easily controlled by the administration of alcohol and opium. Indeed some physicians are in the habit of prescribing opium and alcohol in combination with the drug.

Large doses of quinine have been used and with signal success in some cases. I would class quinine with salicylic acid. They act very much alike, and the only thing that can be said in favor of salicylic acid is that it does not cause as unpleasant effects, though it does produce head symptoms, fullness, and even delirium, but not to the same degree as the alkaloids of bark, especially quinine. Quinine ought to be used, then, in the same class of cases in which salicylic acid is indicated.

We have another class of cases in badly-nourished, weak, anæmic persons. In these you will find the best treatment will be, not by those remedies I have mentioned, but by large, what is called saturating, doses of the tinct. ferri chloridi. Thirty drops given every three or four hours will sometimes be found in the course of three or four days to cut the disease short. How it does it I can not tell you. We must be content with the fact itself when our knowledge extends no further. We must not say, "I will not cure the patient with this medicine, simply because I do not know how it accomplished the cure." That would be unreasonable. While we strain every faculty to solve the mysteries of therapeutics, while we study with the utmost care the physiological action of remedies, the crucial test of their value is clinical experience, and it is that which will finally decide what will be the rank of a drug. Some years ago alkalies were very extensively employed. The carbonate or bicarbonate of potash or soda in doses of twenty or thirty grains was administered every two or three hours. The nitrate of potash was also used. But this was very soon found to be decidedly debilitating to the heart, and it was so nauseating that the patient objected to taking it, and it also caused irritation of the stomach. I have employed the bicarbonate of soda and potash very largely in connection with the *veratrum viride* in sthenic cases of acute rheumatism.

I would mention in connection with this the treatment of acute rheumatism by lemon-juice. That amounts to the same as the administration of alkalies. The acid is the citric, and does not exist in a free state, but as a citrate of soda or potash. So when this acid is taken in large quantities it makes the urine alkaline. The citric acid, during its transit through the circulation, is replaced by carbonic acid; so we find citrates, tartrates, and malates of soda and potash are excreted from the system under the form of bicarbonates. Now these reme-

dies were given on the principle that the poison that causes acute rheumatism is an acid. For a long time it was supposed to be lactic acid, but now we know this is not the *materies morbi*, and we know that the alkalies are not a *remedium universale* of acute rheumatism, though we find they are well adapted to certain cases. It was supposed at one time that the administration of alkalies prevented cardiac complications. I have met with a considerable number of cases that have been conscientiously treated by alkaline measures from the beginning of the disease, and yet cardiac complications arose.

With this brief survey of the remedies used in combating this disease I will close my remarks so far as the treatment directed to cutting short the disease is concerned.

I must now say a few words about the prevention of complications. Can we do it? I think we can to a certain extent. I will put it this way: A certain proportion of cases will have cardiac complications, no matter what we do. In a certain proportion of cases, I have already said, the heart is the organ first affected. In a certain proportion of cases you will find that the cardiac complications arise from the want of attention to proper and necessary precautions. What are they? A person suffering from acute rheumatism, in the first place, ought to have no linen next to his body. He ought to be swathed in flannel. Chambers gives some excellently-reported cases of acute articular rheumatism. He shews how, after patient had been carefully swathed in flannel for a number of days, he allowed his vanity to get the better of him, and put on a shirt with a linen bosom, and in twenty-four hours afterward he had pericarditis. Such events have occurred sufficiently often to make it probable that it is something more than a mere coincidence. If I were attacked myself I would immediately be dressed in flannel from neck to foot. I would sleep between blankets, and when the daily examination of the heart was made the stethoscope should be insinuated between the folds of the blanket. When the daily evacuations of the patient are made he should not be allowed to get out of bed; he ought to use an urinal or bedpan. Then the air of the room ought to be uniformly warm. It is one of the defects in our methods of heating our apartments at the present time. We make a big fire during the day and evening, and during the night it is allowed to die out; and toward morning, when we know the vitality of the system is at its minimum, the air of the sick-room is actually chilly. I am satisfied that in a certain proportion of cases complications are caused by want of attention to these important details. The nurse ought to see that the fire is kept up, night and day, and there ought to be a thermometer in the room by which to regulate the temperature.

The patient's general strength should be kept up. There is no doubt that complications are favored by a much lower vitality of the system. The tendency is to a very considerable reduction