

require skilful hands. We must recollect that nature is making a desperate effort to cast off an invader, and if we drug her off to sleep, and check all the measures she has adopted to defend herself, we are giving the advantage to the enemy.

The history of the profession shows that we have had a tendency to mistake relief from suffering for improvement. A patient bled to the approach of syncope, expresses great relief, but it was the relief which comes from the near approach of death. So opium, alcohol, chloroform, etc., give relief by pushing the system a few stages nearer the boundary line of death. Many believe that opium has a stimulant effect in small doses. I am afraid that many young men, and some older ones, have learned by bitter experience, that even minute doses of opium, not only relieve pain, but, under certain circumstances, produce sleep from which there is no waking. Koch could not communicate cholera to guinea pigs till he had narcotized them with opium.

When we discover a narcotic that does not lower the vital powers, we can use it without fear. In the meantime I hold that no narcotic whatever should be used in the treatment of cholera, unless it seems certain that the relief to pain and shock will do more good than the lowering of the vital functions will do harm. In our choice of a narcotic we should select that which will give the greatest relief to pain, and at the same time produce the least depression of the vital functions. Chloroform by mouth or inhalation and chloral hydrate, seem to meet these indications.

From a study of the action of alcohol it is difficult to conceive how it could do anything but harm. It is certainly an anodyne, but in this respect very inferior to chloral or chloroform. If it were as fatal to bacteria as it is to man, we might expect it would be an excellent germicide, but its action in this respect is very slight. On account of its affinity for water it must assist the disease in robbing the system of its fluids and increasing the thirst. I believe that it belongs to the class of narcotics, all of which weaken the vital powers.

In this I may be wrong, but I find myself in a large and very respectable company, such as Sir William Gull, Sir Andrew Clark, Prof. Wilkes, Prof. Whitla, of Belfast, and a host of others at home and abroad. If this view be correct, it

forms one more reason why it should be sparingly prescribed in cholera.

In a disease in which the causative agent is confined, to a great extent to the alimentary canal, we might expect great results from antiseptics. So far, however, there has been no notable advance made in that direction.

Calomel maintains its reputation as the most valuable antiseptic in this disease. Runnuff and Zeimmsen especially assert its superiority. They commence with a dose of from four to eight grains, and continue with from $\frac{1}{2}$ to $\frac{1}{2}$ grain, every two hours. Paul Gibier, of New York, gives the bi-chloride, but calomel is probably, to a certain extent changed into bi-chloride in the stomach and bowels, especially if an acid be given.

Mineral acids are destructive to the bacilli and are found to maintain that reputation in practice.

Muriatic, sulphuric and lactic acids have, so far, been the favorites, but probably here, as in many other diseases, the sulphurous may be found to be superior to any other as an antiseptic.

But it seems to me more reasonable, instead of using powerful poisons to kill the bacilli, to use measures to carry them out of the bowels along with anything which might be a favorable medium for their propagation. If enemata of hot water be used they would have the additional advantage of supplying heat to the body in a very effective manner, and we know its value in inflamed conditions of the stomach.

During the algid stage, many patients are said to have been rescued by injecting water into the blood. Of the several methods which have been adopted to accomplish this, intravenous injection, which dates as far back as 1834, seems to be the most successful. The procedure has been very much simplified. Now, a simple reservoir for containing the fluid, a piece of rubber tubing and a needle trocar for perforating the vein are all the instruments required. Cantain introduced the method of injecting the fluid under the skin. Grettman, of Berlin, prefers this, but in hospital practice generally the intravenous method met with most favor. In private practice the continuous subcutaneous method has been most used, but was followed by abscesses in some instances. The fluid has also been introduced into the peritoneum, but this method has not been used sufficiently to justify an opinion.