

frame, the mind moves calmly, clearly, self-possessed, and begins to feel the destructive influence, or is gone (with but few exceptions, *only* when the brain has to be supplied with *oxygenated blood*—*only* when the individual is *inarticulo mortis*).

The fourth stage seldom occurs. But when an individual becomes collapsed and lives through it, the fourth stage is present; it is one of reaction, resembling typhus.

TREATMENT.

It is always of great, and sometime even of vital importance, that the patient should lie in bed.

In the first stage give calomel and opium, according to the nature and frequency of the stools.

I have usually commenced in ordinary cases by giving one of the following pills after each *loose* evacuation, viz: calomel thirty grains, powdered opium six grains; mix intimately, and divide into six pills.

In this way, in the course of a few hours, you will probably give twenty grains of calomel and four cases of opium, which, in ordinary cases, will generally prove sufficient, and even in most severe cases you will have administered as much calomel as will be necessary.

When this has proved sufficient, the evacuations will have become far less frequent, and changed in character, especially in consistence. In this early stage the danger is greater the more frequent and the thinner, or more liquid and watery the stools may become. You can continue, therefore, to give one of the calomel and opium pills after each evacuation, if of *this character*, until the whole six are taken; and if the passages still continue, it becomes necessary to continue the opium as follows:

Powdered opium, six grains; powdered camphor, twelve grains; mixed intimately, and made into six pills, giving one of the pills after each evacuation. Rest in bed, fomentation or flaxseed poultices applied to the abdomen, and mustard plasters and warm mustard foot-baths prove also highly beneficial.

When the attack is sudden and severe, give at one dose twenty grains of calomel and two of opium, and repeat the opium and camphor pills as directed, and use the sinapisms, poultices, &c.

In the second period, when the watery evacuations set in, they either resemble in fluidity and color of mustard foot-bath, or are of a rice-water character, with a white powder settling at the bottom of the vessel, or watery, with white floccula or flakes interspersed in it, making it some what turbid, looking like whey. The voice fails also, and cramps or spasms come on in the legs, arms, and sometimes in the bowels.

The case is now extremely urgent, and unless the watery discharges can be arrested, the patient must pass into the collapse, from which there is little if any hope.

I have been in the habit of giving sugar of lead and opium in the following way, in pills:

Sugar of lead, one drachm; powdered opium, twelve grains; mix intimately, and make into twelve pills. Give one after every watery evacuation, and if these are copious, oftener, or in larger doses, say two pills at a time.

Or it may be given by injection, thus:

Take sugar of lead one drachm; dissolve in water six ounces, (three wineglasses full,) and add a teaspoonful of laudanum, and give half as an injection, and repeat as may be necessary.

To allay the distressing nausea, vomiting, and insupportable thirst, (in this and the following stage of collapse,) use—

Crasote, four drops; mucilage of gum arabic, or flaxseed tea, one tablespoonful, *shake well together*, and give a teaspoonful four or five times every day, or oftener, as may be necessary.

As in this stage they are about to pass into collapse if it is not stopped, the use of stimulants soon becomes necessary. I have used champagne brandy toddy and carbonate of ammonia, as follows:

Carbonate of ammonia, two drachms; powdered gum arabic, two drachms; water, three wine-glasses full; mix, and give a tablespoonful every fifteen minutes or half-hour, as may be necessary, using at the same time the brandy or wine alone. Direct sinapisms and blisters over the pit of the stomach and to the extremities. The spasms are sometimes distressingly severe in this period. They are greatly relieved by friction with No. 6, (Thompsonian remedy,) heated and used as a liniment, or red pepper and whiskey heated together.

In the collapse little can be done except giving the crasote mixture, a teaspoonful every two or three hours, and using the stimulants above-named as freely as they can be borne. Apply blisters and sinapisms, and give warm chicken-broth either by mouth or as an injection. Give also as a stimulant the following:

Powdered camphor, two drachms; Hoffman's anodyne, two ounces; mix from a teaspoonful to a tablespoonful at a dose, and repeat according to the effect.

This remedy, in the dose a teaspoonful three or four times a day, in half a wineglass full of cold water, is an excellent remedy, in the premonitory and forming stages for the looseness and griping.

The fourth period is treated like typhus.

In all the foregoing it will be seen that opium is the great remedy, and the calomel and sugar of lead, its main adjuvants. Their action, to my mind, in affording relief, is easily explained.

From careful examination of the symptoms of the disease, it is readily seen that its first manifestations are all referable to the alimentary canal; there is an exalted sensibility of the stomach and bowels at the first outset—an uneasiness that very speedily results in loose dejections; an irritation seems to be set up throughout the alimentary canal, the peristaltic movements become rapidly increased—the secretions are profusely poured forth, becoming thinner and thinner, while the irritation augments until it resembles somewhat that caused by the hydragogue cathartics, such as elaterium, but which in its action far outstrips them in effect. When it arrives at its height, the discharges consist solely of the watery portion of the blood, separated from it through out the whole extent of the intestinal tube.

That the cause of this disease is poison, I cannot decide. It certainly does not enter the blood or if it does, opium is a certain antidote to it. It seems more reasonable to me to regard it as acting on the nervous system at large—in a way somewhat analogous to sea-sickness causing a reflux of blood on internal parts, looseness and relaxation of the bowels, and sphincters, and sensation of faintness and sinking.

There is no disease milder in its first attack—none more frightful and fatal if neglected. Like a hay-ric on fire, at its outset a grasp of the hand may extinguish it—neglected a few moments, destruction is inevitable.