

when there is uncertainty as to the state of the bowels, it may become advisable to exhibit some mild laxative; but should even this produce undue action of the intestinal canal, it should be checked by means of a few drops of laudanum given in an aromatic draught.

In the management of the diarrhoea, all aperients must be carefully avoided.

Saline Mixtures.—No dependence should be placed upon them. If something must be done, however, to amuse the patient, a mixture with citrate of potash or ammonia may be prescribed, as it tends to allay the thirst and promote determination to the skin.

Cerebral Symptoms.—When there is much excitement, with throbbing headache, flushing, restlessness, and perhaps delirium, the reduction of the vascular fulness may be best accomplished by tartar emetic, given in small doses and repeated every three or four hours, and applying a spirit lotion or cold water to the scalp previously deprived of hair; these proving insufficient, a few leeches may be put to the back of the ears. If symptoms in other organs arise to indicate that the struggle is to be a severe one, the question of further blood-letting will be forced upon our consideration.

Blood-letting.—On comparing carefully the results of cases treated by others with my own experience, I am satisfied that in mild cases, bleeding is uncalled for, and tends but to lower the vital powers, and retard convalescence.

But in intermediate cases, when, in addition to the intestinal affection, there is unusual general excitement, or, it may be, some organ important to life implicated, I have observed marked relief from the loss of a few ounces of blood (rarely exceeding ten), taken in the early stage of the fever, and that besides the great improvement in the feelings of the patient, the duration of the fever has been shortened.

In cases where the symptoms pursue a rapid downward course, and a state resembling delirium tremens sets in, with sleeplessness, rapid, soft, and compressible pulse, cool skin, pale face, low muttering delirium, tremors, and starting of the tendons, bleeding would take away the only chance of recovery. The treatment must now consist in warm fomentations to the head, of vinegar and water, blisters to the temples and forehead, and mustard poultices to the extremities; supporting the strength by wine and nourishment, whilst the nervous system is tranquilized by the internal employment of quarter-grain doses of tartar emetic with a sixteenth of a grain of acetate of morphine, given in spirit. Mindereri, or solution of the acetate of ammonia, and repeated every two hours until sleep is obtained. This is the mode of treatment introduced and practiced with such success by the late Dr. Graves. The scalp should at the same time be enveloped in a spirit lotion, and care be taken that nourishment be administered at regular intervals, and not postponed until the patient awakes spontaneously.

Wine.—Alcoholic fluids should not be prescribed indiscriminately in typhoid fever, but rather be considered as an occasional remedy for especial cases. When employed, they should be given carefully, and at stated intervals, when the exhaustion is greatest, as at night, when a little wine administered with judgment, is often followed with refreshing sleep. If it excite the patient, cause the pulse to become more wiry, or render the tongue

drier, its use should be temporarily suspended.

Although most applicable to the latter stages, circumstances occasionally arise which require the administration of stimuli without regard to the period of the fever. The powers may suddenly give way, rendering immediate and energetic stimulus necessary to obviate the tendency to death, when brandy, in half-ounce doses, frequently repeated, will often save the life of the patient.

Diarrhoea.—When moderate, this should not be interfered with, but should the number of evacuations exceed three or four in the 24 hours, they must be checked to prevent the drain upon the patient's strength, for this purpose, a few drops of laudanum (5 or 6), or pargorie (15 or 20), in an agreeable vehicle, generally answers very well, and may be repeated according to circumstances. The mineral acids may often be advantageously combined with the tincture of opium as 15 m. diluted sulphuric, nitric, or phosphoric acid, with 3, 4, or 5 m. of the laudanum.

Enemata of 10 or 15 drops of the tinct. opium with three or four ounces of starch gruel, is often a preferable mode of checking the looseness, when the patient can be made to submit to them.

Should opiates prove unavailing, astringents may be conjoined with them. The salts of copper, silver, and lead, I consider superior to the vegetable astringents, for when judiciously managed, I have found them to do all that any remedy can affect in controlling the diarrhoea.

The acetate of lead I am in the habit of giving, even in the early stage, every six or eight hours, under the impression that it is capable, not only of controlling the purging, but of keeping in check the ulcerative process in Peyer's patches, and removing the tympantitis. It may be given alone in three grain doses, or combined with from a sixteenth to a twelfth of a grain of the acetate of morphine.

The sulphate of copper with opium is also a valuable remedy; I do not know of a better, especially in protracted cases—an eighth of a grain in pill with an equal quantity of opium given every four, six or eight hours, will seldom fail of checking the diarrhoea, whilst it seems to exercise a beneficial influence on the intestinal affection.

Quarter grain doses of the nitrate of silver, with or without opium, every six hours, or after every liquid evacuation, often exercises a remarkable control over these discharges. It should be given in the form of pill. Some practitioners do not employ it from fear of its darkening the skin. I have used it extensively and often continuously for a considerable time, and have never yet witnessed any such effect from its administration.

Alum is another remedy of the astringent class that may be relied upon; it should be given in the form of whey. This is made by putting one drachm of powdered alum into a pint of boiling milk. The fluid portion, after separation, may be given in doses of two tablespoonfuls every three or four hours, or oftener if required.

Tympantitis.—Much relief may be obtained from warm fomentations kept constantly to the swollen intestines, and one of the most agreeable modes of applying them is by means of folds of lint wrung out of boiling water, and placed upon the abdomen as hot as can be borne, covering it afterwards with oiled silk, or gutta percha tissue, to prevent evaporation; renewing the heat from time to time, as desired. When the tympanitic distension is considerable, a small quantity of spirits of turpen-