

tea, when reaction was established, but had no stimulant whatever until a few days before she went out of the hospital (on November 13th), when a little brandy and soda-water were allowed. At the places where the injections had been given, there was a little superficial redness and tenderness for a few days; but some mild arnica lotion was applied to the skin, and no further inconvenience resulted. She made a very good recovery; and, more than four months afterwards, is in good health, and has shown no ill effects whatever on the result of the disease.

REMARKS.—Although the particulars here given are only those of a solitary case, still they may be worth publication in the pages of the *British Medical Journal*. At all events, they apparently show, that a very considerable quantity of a powerful vascular depressant, like chloral-hydrate, can be introduced into the system during the cold stage of cholera without doing any harm. And this, taken in conjunction with the fact now generally recognised, that alcoholic stimulants do positive injury in that stage, may give some indication as to the correct principle of treatment that is required.

Without going into the different symptoms enumerated above in this paper, the writer desires to invite particular attention to two of them, viz., the resonant sound emitted by the usual area of cardiac dulness, and the almost total absence of the sounds of the heart, and ventures to give the following attempt at an explanation of their causation.

From personal experience of an attack of cholera, the writer feels convinced that at the commencement the contractions of the heart become more forcible, the calibre of the arteries become smaller, and there is generally increased arterial tension, probably caused by excessive stimulation of the vaso-motor centre. As the cold stage becomes intensified, the spasm of the muscular walls of the heart is so strong that there is almost a continuous systole, the diastole not being allowed to take place so as to dilate the cavities as in health. It, therefore, occupies a smaller space than usual, and the first sound is only faintly heard, the second being indiscernible. Then, the whole of the arterial muscular fibres being also in a state of contraction, it