

XV.—Jewdeen, a Hindoo, aged 35, admitted 20th September, 1869, with fever on him. A purge was given, but the fever continued the whole of the 21st; on the 22nd half a drachm of the solution was injected, after which the fever left him, and he was sent to duty on the 1st October.

(To be continued.)

HOW DOES IPECACUANHA CURE DYSENTERY?

By A. B. HALL, *Assistant Surgeon, Royal Artillery.*

THIS is a question which has been often asked, but which does not appear to have been answered satisfactorily. Waring, in his "Manual of Practical Therapeutics," page 296, tells us that "ipecauanha possesses considerable sedative powers, as is shown by its influence in hæmorrhagic diseases;" and at page 298—"Its beneficial operation is probably due to its power of diminishing morbid arterial action, and determining to the skin;" but he does not enter into details as to the manner in which he supposes it does so. Garrod tells us that it is given in hæmorrhages "on account of the *sedative* effect on the vascular system which follows the nausea." In Pareira's *Materia Medica*, vol. 11, part 2, page 1597, we find,—"the most remarkable of the effects of ipecauanha seem to be produced by the agency of the 8th pair of nerves." At page 1599, Pareira ascribes its efficacy in dysentery, partly to its diaphoretic powers, and also to its "tendency to produce an antiperistaltic movement of the intestines," though on the preceding page he writes,—"in severe forms of the disease, no one, I suspect, now would think of relying on it as his principal remedy." This was written several years ago. The experience of most Indian practitioners enables them *now* to arrive at a different conclusion. Still, although several explanations have been advanced, the question does not seem to have been answered definitely; and in hopes of being able to further the elucidation of it, I again bring the subject forward.

Now, let us examine what are the effects produced by ipecauanha on the body. When taken internally, it causes nausea; and, if swallowed in sufficient quantities, vomiting,—accompanied by considerable diaphoresis. When applied to the skin, in the form of an ointment, in time it will produce a crop of pustules.

Now, why does it cause vomiting? Headland, in his "Essay on the action of medicines in the system," page 228, calls this remedy a "special sedative," and states that it exerts an influence over the three functions of respiration, circulation, and digestion." It, with others, "affects the heart, lungs and stomach, parts which are supplied by branches of the vagus nerve, as well as by the sympathetic." It therefore appears to cause vomiting by exercising a special sedative effect on the pneumogastric nerves, and the medulla oblongata, from which they arise. But, when the medulla is *irritated*, as, for example, by tuberculous deposit at the base of the brain in scrofulous subjects, vomiting is also observed. So that whatever materially disturbs the normal equilibrium of nervous force in the medulla oblongata, one way or the other, either to increase or decrease it, is followed by the *same apparent effect*. If it is irritated, and its nervous force increased, vomiting results; if a special sedative acts on it, and its nervous force is decreased, vomiting also follows. And this, I fancy, is the way that the controlling action of ipecauanha over the vomiting of pregnancy can be accounted for. The pneumogastric nerves, and medulla, irritated through the sympathetic nerves by the state of the uterus, cause vomiting; small doses of ipecauanha, by soothing those nerves, stop it. But although ipecauanha

probably acts with great benefit by its diaphoretic action on the skin, and its general sedative effects on the nervous system, I do not think that the entire curative power of this drug in dysentery can be explained in that way.

The direct effect of ipecauanha applied to the skin is to irritate it, and produce a crop of pustules. If it has such a stimulating effect on that thick mucous membrane—the skin—may we not presume that it has a more powerful one on the delicate mucous membrane of the intestines? I believe that it is this local stimulating action of the drug on the mucous membrane of the intestines, combined with its general sedative effects on the nervous system, and its diaphoretic action on the skin, which makes it of such value in dysentery. The asthenic inflammation of the bowels (I use the term *asthenic*, because I think, from its proneness to run into ulceration, that the inflammation of dysentery is essentially of a *low type*;) is arrested; the gelatinoid mucus which has been exuded is washed away by a flow of ordinary mucus from the intestines; a healthy action begins to be re-established, at the same time that the nervous and vascular systems are soothed and quieted; and the skin is kept in good working order; and after three or four large doses of the medicine, a cure is generally effected. I say *large* doses, because I have seen patients cured by drachm doses in a few days whom small doses only nauseated. The following is the plan that I generally carry out when a man is admitted into hospital with acute dysentery. The first day, he gets a dose of castor oil, and is put upon milk diet. Next morning at 10 o'clock, having had breakfast at 8, a mustard plaster is put over the pit of his stomach, and after it has been on about 10 minutes, he gets ʒi of ipecauanha, either in pills, or mixed with one tablespoonful of water, to make it of a semi-fluid consistence. He is then ordered to lie on his back for *two* hours, and not to drink anything at all. The mustard plaster is kept on about 30 minutes. This generally checks vomiting. If he can prevent himself from being sick for an hour or so, most of the medicine will have been retained. Usually, after the first dose, a very favorable change is noticed in the stools, and sometimes after the second dose no more blood is passed. I mention these details simply to bear my share of testimony to the great value of *large* doses of ipecauanha in dysentery. It is sincerely to be hoped that the efforts now being made to grow ipecauanha in India may be completely successful; and that we shall never run short of a plentiful supply of what, I think, we may really call *the* specific for dysentery.

A FEW REMARKS ON SUN-STROKE.

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I FEAR that when a case of sun-stroke has to be treated, it is more often under circumstances in which the use of the thermometer is inconvenient, as in the field or on the march, and that, if in hospital or private practice, the urgency of the case appears to demand the application of remedies without delay. But it is desirable that the temperature of the body of a patient, suffering from this disease, should be noted, if only in satisfaction of a praiseworthy curiosity, and spirit of enquiry, because it will be found that the disease is so far unlike other diseases marked by high temperature, as to be singularly amenable to the effects of cold water;—I mean that the temperature once lowered by this means remains permanently at, or a very little above, the natural standard until full convalescence has taken place.

How different this to the effect produced in fevers in which the temperature rises after the cold bath or sponging, which moderates, but does not remove, the inward heat.

In a case of rheumatism with high temperature recently treated at University College by repeated cold baths, the tem-