TREATMENT OF AMŒBIC DYSENTERY BY ALCRESTA AND EMETIN.

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ALCRESTA, exhibited either alone, or as an adjuvant in the treatment of amœbic dysentery by emetin, was introduced into this country from America two or three years ago, having been tried there and elsewhere with some degree of success. The experience of Dr. Andrew Connal in West Africa is, that these drugs in combination are superior to former methods of treatment, and are as useful in the more chronic and recurring forms of the affection as in its acuter early stage. The cases of amœbic dysentery now met with in this country as a residue of the war, are of the chronic intractable type, and very resistant to treatment.

Since April of 1921 several cases of this type have been treated in Ruchill Fever Hospital, by the oral administration of alcresta combined with hypodermic injections of emetin. In all, fifteen cases have been so treated, and the following is a brief account of the results and of the subsequent history of seven in whom the entamœba histolytica or its cysts were found in the stools at the commencement of the treatment. The remaining eight cases have not been included because the diagnosis rested on the patients' histories; although they had symptoms of dysentery, the stools on or just previous to their admission to Hospital, did not contain the entamœba histolytica.

The method adopted was to administer one tablet of alcresta* by the mouth thrice daily along with a hypodermic injection of emetin (1 grain) daily for ten days. A combined course of this

* Each tablet contains the alkaloids (emetin and cephælin) from 10 grains of Ipecacuanha U.S.*P.* The alkaloids are held in adsorption by hydrated aluminium silicate (Martindale and Westcott).

kind is equivalent to the administration of approximately 20 grains of emetin—10 orally and 10 hypodermically. After an interval of a week, a second similar course of treatment is given, and this may, if thought necessary, be followed by a third course at a further interval of a week.

The following is a brief note on each case treated by this method:—

CASE I (J. A.).—Contracted dysentery in Salonica in 1916. An intractable case. Has spent the best part of four years under treatment in various hospitals. In Ruchill Hospital, April-June, 1921. Entamœba histolytica present on admission. Two courses alcresta and emetin. Stool negative twice on dismissal. Attended Clinic in October, 1921, reporting further relapses; entamœba histolytica again present. No permanent improvement. At present in Convalescent Home (March, 1922).

CASE II (J. R.).—Said to have contracted dysentery in France in 1915. Had continuous diarrhœa for ten weeks before admission. In Hospital, April-May, 1921; cysts of entamœba histolytica present on two occasions just prior to admission, and again on admission. Two courses alcresta and emetin; stool negative (twice) on discharge. No further relapses. Present condition (March, 1922) satisfactory; no diarrhœa; stool microscopically normal.

CASE III (J. O.).—Contracted dysentery in Egypt in 1915. History of severe recurring attacks. Hospital, April-May, 1921. Entamœba histolytica present on admission; two courses alcresta and emetin. Stool negative (twice) on discharge. Diarrhœa returned within a month after discharge with pathogenic amœbæ still present. Symptoms of recurring diarrhœa continued till re-admitted to Hospital in March, 1922, suffering from diarrhœa with blood and mucus, which has again cleared up after one course of alcresta and emetin.

CASE IV (P. D.).—Contracted dysentery in March, 1919. In Hospital, May-June, 1921. Entamœba histolytica present before and on admission. Stool negative (twice) on discharge. *Condition* (March, 1922).—Has had occasional mild diarrhœa since discharge; condition satisfactory; stool microscopically normal.

CASE V (G. P.).—Contracted dysentery in Egypt in 1917. In Hospital, May-June, 1921. Entamœba histolytica cysts present before and on admission. Stool negative (twice) on discharge. *Condition* (March, 1922).—Complains of regular recurrences every three or six weeks; general condition fair; specimen dysenteric in character, and entamœba histolytica present.

CASE VI (J. McL.).—Contracted dysentery in 1918. In Hospital, May-June, 1921. Entamœba histolytica present on admission, and repeatedly since December, 1920. Discharged well. Stool negative (twice) on discharge. *Condition* (October and November, 1921).—Entamœba histolytica cysts still present; complains of constant mild diarrhæa.

CASE VII (W. P.).—Contracted dysentery in 1916. In Hospital, August-September, 1921. Intractable case; several times in Hospital. Entamœba histolytica constantly present for months prior to admission. One course alcresta and emetin. Much improved, but pathogenic cysts still present on discharge. Had also a Flexner "Y" infection. Remained well for five months after discharge, but has relapsed severely since February-March, 1922. Entamœba histolytica cysts present. This patient had a double course of alcresta alone as an outdoor patient during May, 1921, with a definite improvement in his condition, which was, however, not permanent.

The cases recorded were all examples of old-standing chronic infections for which treatment had hitherto been of little avail. It will be noted that most of them contracted the disease during the early period of the war when facilities for diagnosis and appropriate treatment had not been perfected to the degree which they ultimately reached. Among these early infections are to be found the most intractable cases.

The results of the treatment are judged by the after-histories of the patients. In two of the cases in the above series the result so far appears to have been satisfactory, their condition having remained good and their stools microscopically negative ten months after discharge from Hospital. The remaining five, after more or less brief periods of improvement, have relapsed, pathogenic amœbæ or cysts again appearing in their stools. In

all, the improvement during treatment was marked and rapid, and all, with one exception (Case VII), had normal and microscopically negative stools on discharge. A couple of negative results only indicate, of course, that the amœba has been reduced in numbers and is difficult to find, and cannot be accepted as a standard of "cure." As the after-histories of these five patients showed, the benefit produced by the courses of treatment was short-lived. Possibly a third course of alcresta and emetin, or larger doses of the former might have been administered. The *Annals of Tropical Medicine and Parasitology* (vol. xi, No. 1, June, 1917) contain an account of the results of treatment of amœbic dysentery by alcresta. The authors conclude, from an experience of 93 cases in which the drug was given alone, that "(1) a sufficient first treatment will cure about 65 per cent of cases; (2) a course of 20 to 25 grains emetin in this form seems, on the whole, to give the best results. Ten grains or less is probably insufficient."

It is thought worth while to record this experience of the combined method of treatment, limited as it is, especially as the cases treated were old-standing and intractable infections. The drug was in all cases well borne by the patients. In Ruchill Fever Hospital, the cases were under the care of Dr. J. Frew, and the bacteriological examinations were carried out by Dr. W. R. Wiseman, of the staff of the Public Health Laboratory.