# PRACTICAL REMARKS

ON

# THE ENDEMIC DYSENTERY

OF

COLOMBO,

# ISLAND OF CEYLON.

#### BY

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BENARES : MEDICAL HALL PRESS. MDCCCLX. "It will not be disputed, that there occur few diseases in Military life which may not be arrested by means of art, if the means be applied with skill at an early period; and that there are few which do not imply danger, if they be left to themselves, or if they be feebly treated."

JACKSON.



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#### ON THE

## ENDEMIC DYSENTERY OF COLOMBO,

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DYSENTERY may be considered the Endemic disease of Colombo, and on reference to the valuable "Statistical Reports," it will be seen how constantly prevalent, and frequently fatal, it is, not only there, but throughout the Island generally. It seems to assume a more severe form during the variable weather which precedes the commencement of either monsoon; the nights at this period being generally calm, and the atmosphere loaded with moisture; whereas in the dry portion of the N. E. monsoon not only are the cases more rare, but the patients in hospital appear to recover, at this periodfrom states which would be hopeless at any other season of the year.\*

To account satisfactorily for the production of this disease has always been considered a very difficult matter. The following are, therefore, merely enumerated as probable *causes* for its appearance amongst the class of Europeans with whom the military medical officer has to deal :—

1st.—Exposure to cold and moisture, when relaxed by the use of intoxicating liquors, or profuse perspiration, or when overheated, or asleep, in a close barrack or guard room.

<sup>\*</sup> The S. W. Monsoon prevails from April to September, during which period the greatest amount of Rain falls. In October and November the weather is very variable and often wet. The N. E. begins in December and continues till March, but blows most steadily in January and February.

2ndly.—To the same causes, more especially aided by habitual intemperance, errors in dict, and the use of unripe fruits.

3rdly.—Inattention to the bowels, and inactivity or weakness of the digestive organs.

4thly.—To cold, rain, dews,\* &c., while on sentry at night.

5thly.—To some specific cause.?

The influence of season on the prevalence of this disease appears to be tolerably well established, for of 50 Epidemics occurring in Europe, and of which we have authentic accounts, 36 appeared in Summer, 12 in Autumn, 1 in Winter and 1 in Spring. Annesley and more recent writers have shown that the hot and moist season in Bengal nearly doubles the number of attacks, and the same observation holds good in Ceylon.

The Symptoms and Anatomical characters do not materially differ from those usually observed in tropical dysentery, and as these are so well known, I need not give a mere enumeration of them here. There is one peculiarity, however, which I do not find mentioned in the works of Davy, Marshall and other writers on the diseases of the Island, though it had not escaped the observation of my very talented predecessor Dr. Browne. I allude to the very low specific gravity of the urine, particularly in cases of long standing, which will be found to vary from 1002 to 1014, rarely reaching so

\* At page 5 of the "Statistical Report" it is stated that "dew "is rarely deposited in any quantity owing to the equality of the "temperature of the day and night," but this is an error, for whenever the conditions favourable to its production are present it may be observed in abundance at Colombo; except when the dry "land wind" prevails in the nights during the N. E. Monsoon, or during the S. W. when the Sky is much clouded, and a strong breeze often blows for 24 hours. During the former Monsoon the "dew point" will be found to vary from 8 to 11 degrees below the temperature of the air; while in the wet portion of the latter it is uncertain, varying from 3° and 8° below the temperature. kigh as 1018, the average being 1009; and to diminish as the purging increases, and attain a higher standard as the purging abates, or fever comes on. The acid reaction of the lighter specimens of the secretion are feeble, of the denser more marked, unless in the chronic disease; and the quantity of urea small, even for that low specific gravity. In many instances the nitric or muriatic acids produce a distinct purple tinge, but seldom any visible iridescence when treated in the manner directed for the detection of bilc. Of Albumen I have never been able to discover any trace even where the patients were affected with Ascites, or other form of dropsy.

The disease, as it occurs at Colombo, may be considered as primarily an inflammation of the mucous membrance of the intestine, having its seat for *the most part in the colon*, or rectum, and not uncommonly in both, or along the whole course of the canal; accompanied in almost every instance by fever of the distinctlv Remittent or purely Intermittent type; a fact frequently overlooked, particularly by those but recently arrived in the Island; yet it is one of the utmost necessity to remember while treating such cases; for unless this complication be combated at the same time that we attack the local or dysenteric symptoms, these latter can *not* be effectually overcome, and will terminate in distressing and often protracted discase, or perhaps end fatally.

The Dysentery of Ceylon appears to be much more frequently complicated with Remittent or Intermittent fever, and not unfrequently with Scurvy, than with any well defined or special lesion of the Liver, as is the case in Bengal and elsewhere.

Nor is it of less importance to apply our remedies with vigonr, and as soon after the commencement of the attack as practicable, for what Hunter remarked of the dysentery of the West Indies is particularly applicable here. "The dysentery, like the fever," says he, "requires to be taken care of early, for the means that will either overcome, or greatly mitigate the disease at the beginning, will not be able to make any impression upon it, after it has continued some time."

In the *Treatment* the indications to fulfil are :

1st.—To subdue the inflammatory action, by evacuating the matter contained in the intestines, and, when present, to remove the fever.

2nd.—To lessen the irritation of the canal, and produce a healthy state of its secretion.

To answer the first, the remedies most to be relied on, provided the case be seen early enough, are general and local blood-letting, a very rigid attention to diet, the cautious use of mild oleaginous purgatives, and above all, the exhibition of warm water Enemata-General bleeding is very rarely required, except in the strong, robust, and recently arrived Europeans, and ought, almost as a rule, to be avoided in old soldiers, and others of long residence in the low country. The advantages of depletion will, for the most part, be obtained by the free application of leeches over the seat of pain, on the perineum, or over the lowest part of the sacrum, and repeating them as often as may be necessary until the pain is extinguished. After the employment of these means, a dose of Castor oil with Tincture of Henbane should be administered, and followed in about two hours by large warm water injections, to the extent of four, five, and even six pints, by which the bowels will be " effectually opened and accumulated fæces removed, while the warm water rather soothes than irritates the inflamed membrane," and "moreover the effect is produced much more speedily than by purgatives given by the mouth." Warm water Enemata, in cases of dysentery, diarrheea and colic, are unquestiona bly most powerful and valuable adjuvants to other remedial measures. The good effects of their use cannot be overstated, and daily experience and observation, extending over a service of nearly thirteen years in Ceylon and Bengal, confirms this opinion; "for a patient who before has had frequent small stools, accompanied by pain and tenesmus, after the enema has a copious fæculent motion without tenesmus, and from this time the evacuations become less frequent, contain less blood, and by daily repetition of the injection with scarcely any other remedy a cure is produced.\*"

In chronic cases, however, I have not found these enemata of any service, as little fluid can be retained, and by the distension seem rather to irritate than otherwise. On the other hand, the relief afforded in the acute or more recent forms is so great, that it is by no means uncommon for the patient himself to solicit the repeated exhibition of them; and in the dysentery and other intestinal diseases of children they are equally valuable.

The second object, or the diminishing the irritation, and creating a healthy state of the bowels, I have almost uniformly found to be best attained by a persistence in these measures, and the administration, after the bowels had been cleared out, of a powder containing

Pulv. Doveri, grains three.

- ,. Ipecacuanæ, grains, one or two.
- " Cretæ ppt. vel.
- " Sesquicarb. Sodæ, grains, four.
- " Catechu, grains three.

every two, three, or four hours according to the urgency of the symptoms. Whenever there is a tendency to feverishness, one, two or more grains of Sulphate of Quinine should be added. In many cases where the

<sup>\*</sup> Vide Edinburgh Medical and Surgical Journal No. 178.

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remittent or intermittent fever ran high, as is witnessed perhaps oftener at Kandy than elsewhere, I have not infrequently increased this to twenty and thirty grains twice a day, with a success over the disease as satisfactory as it was gratifying. If the *tormina* and *tenesmus*, or the calls to stool, prove troublesome, after the use of the warm water injections, these should be aided by one composed of a drachm of fincly powdered Acetate of Lead and the same of Tincture of Opium, or ten grains of Nitrate of Silver and three grains of Opium. Occasionally a large *hot* poultice of rice flour, or the like, may be laid over the whole abdomen with advantage.

The employment of *Mercurial preparations*, as appears to me too indiscriminately recommended by Indian practitioners, is very rarely needed, and requires the greatest caution, in consequence of the scorbutic tendency of many of the cases, particularly in the older soldiers, and those debilitated by long insular residence; for unlike India there is no "cold season" in Ceylon whereby to recruit the lost health of the encrvated "exotic European."\*

The only cases in which the "Mercurial treatment" can be advantageously used are those occurring amongst the strong and plethoric recruits, but recently arrived, with whom, the treatment by Calomel, Opium and Quinine, with general blood-letting, and the daily use of the warm water injections, will often act "like a charm," but cannot, or very rarely, be repeated a second time, at least after the third or fifth year of residence, without

<sup>\* &</sup>quot;Perpetual Summer may be said to prevail throughout the "year, varied only by the occasional difference of a few degrees in "temperature, or by a change from dry to wet weather, or the reverse." The difference of temperature at Colombo rarely exceeds 16°, and is very seldom so much as 10°. A Fahrenheits Thermometer exposed to the full influence of the sun indicates a range from 135° to 140."

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serious, if not permanent injury to the patient.\*

During *convalescence*, a course of mild tonics, generous diet, and attention to proper clothing will conduct the cases to a successful termination.

The *Chronic states* of this disease, into which however the acute forms should seldom be permitted to run, are often cured, and always very greatly benefited, by the steady internal use of a combination of Cod Liver oil, Liquor Potassæ, Quinine and Morphia, assisted by the above enemata. With children pure Glycerine may be substituted for the Cod Liver oil with corresponding results.

Change of climate will always be followed by rapid improvement, for this often appears to be the sole condition on which either life can be prolonged, or recovery expected.

As the history, causes, and various modes of treating this disease have been discussed by far abler writers, I have confined myself to a brief account of a method of cure, which unremitting clinical observation has taught me to consider practically the best, and I have done so, not "as undervaluing the labours of others; but from a conviction that in physic, as in all other branches of natural knowledge, he who shall content himself with narrating what he has seen, will perform a work more likely to be useful towards the improvement of knowledge, than if he endeavoured to add to the value of his own labours, by collecting the opinions of others, which there is some danger of his mistaking or misrepresenting."

<sup>\*</sup> In cases of simple Diarrhea, arising from relaxation of the mucous coat of the intestine, and unaccompanied by organic change, the Native Cingulese remedy, known as the "Wood apple," "Bele fruit," or the Egle Marmelos, mixed with Quinine, is invaluable; but in Dysentery, properly so called, it is productive of no advantage beyond slightly improving the appetite.

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