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AN

INAUGURAL DISSERTATION

ON

Acute Dysentery

SUBMITTED TO THE

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BY

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OF

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To

Prof. Bowling.

The learned and accomplished lecturer and teacher, the devoted descipale of science, and the Students friend this article, is Respectfully

Inscribed, by

The Author.

Acute Dysentery

The recent extensive prevalence of Dysentery in our country and the universal fatality with which it has been attended, has invested it with a new interest to the American practitioner of Medicine. Few diseases, if indeed any, have within the last two or three years committed more fearful and widespread havoc in our country than the one we are now considering.

The sturdy farmer of New England, the hardy and adventurous pioneer of the Far West, and the ease taking planter with his booty slaves in the "Sunny South", have all alike fallen under its baneful power, have been stricken by it and have died. Not that all die of it who are attacked by it, by any means; for this is far from being the case, yet great numbers of every age and sex have been destroyed by it.

The number of its slain has been but little if at all inferior to that of its "illustrious predecessor Asiatic Cholera, the pestilence that literally "walketh in darkness, and that wasteth at noonday". It well becomes us then as guardians of the public health to inquire, what is Dysentery? What its pathology? What its treatment?

Upon this inquiry we now propose to enter, not with the view however of promulging any new or startling theory with regard to its pathology or treatment, but simply to give a succinct history of its nature, symptoms, and the therapeutical means adapted to its cure.

We shall not enter into a disquisition of its various Complications; but treat of it as a disease per se.

We will reverse the fashionable order of treating on diseases and speak of its pathology

first, by which we may perhaps be the better able to comprehend and understand the symptoms.

We premise then that the essential Character of the disease consists in inflammation of the mucous coat of the Colon, often involving that of the ilium and rectum. Here we inclined to quarrel about names we would insist that the disease should be called Colonitis after Dr. Ballingall, or Colite (Colitis) after some of the French writers; although these terms do not convey an adequate idea of the disease. We all understand what is meant when authors speak of Dysentery, and there is now no danger of being misled by a misapprehension of the term; and for this reason we shall not hesitate to use it in this unpretending little treatise. The anatomical lesions found post mortem in persons dying of uncomplicated Acute

Dysentery, are those of simple inflammation of the mucous membrane of the colon, sometimes extending down the rectum and along the ileum. The membrane will be found, when examined after death, to be red and congested and sometimes deepseated ulcerations, according to Dr. Brown of London, may be met with. The part inflamed will be found sensibly elevated above the healthy surface surrounding it, but not so much so as in those who have died of the Chronic form of the disease. The inflamed points will also often be found coated with a puriform, sanguineous or sanious secretion, which by a careless observer might very easily be mistaken for ulcerations, but if the part be separated and washed, no solution of continuity will usually be found. According to Dr. O'Brien, a pseudo

membrane sometimes forms on the inflamed surface, more often, in the colon than in the illeum or rectum. He found it sometimes in distinct patches, then again the mucous membrane was found covered with a uniform layer of white lymph. If gangrene has preceded death, it will be denoted by lividity and preternatural softness, involving the muscular tunic of the bowels, and perhaps vesicles containing a fetid fluid will be found studding the membrane.

Symptoms. Dr. Elliotson has well remarked that the symptoms of Dysentery "are a mixture of those of Colic and enteritis;" and we will offer a superaddition of some others. Diarrhoea is often a precursor of the disease, but it may be preceded by

Constipation accompanied with griping, flatulence and other symptoms of colic. The patient will often have a distinct rigor and afterwards a reactionary fever. Upon the intervention of a longer or shorter period after these symptoms, the patient will begin to discharge blood, or mucous, or both, per anus. These discharges occasionally come on in the very beginning of the disease as it were. They will be attended with tenesmus, and the patient will have tormina, a twisting sort of pain, in the region of the colon, caused by spasm of that bowel from irritation of acrid matter passing along over its inflamed mucous surface. This symptom is often very severe, giving the patient great pain. Tenesmus, as we have already remarked, will always be present

in Dysentery. The patient will have pregrent and irresistible desire to go to stool, and will usually discharge nothing but a little blood or mucous, or perhaps a mixture of both; and as sometimes happens a few hardened faeces along with it. Occasionally shreds of fibrin are passed, and at other times again lumps of matter resembling suet are discharged. Sometimes there will be a copious discharge of blood, then again the mucous will only be streaked with it; or it may come away in clots. There is a sense of heat or burning felt about the anus and extending up the rectum, aggravated by the effort at defecation. If fever be not present from the beginning it usually comes on as soon as the disease is fully established. The skin is hot and

dry; the pulse is hard, somewhat full, and increased in frequency. The tongue presents a white furred appearance; or else it is dark and dry and frequently presents a smooth and glazed appearance, and looks as if the papillæ were contracted and the gemmæ shortened. The patient is often greatly prostrated, and sometimes experiences difficulty of voiding his urine, which is usually scanty and highly coloured. There is usually more or less pain on pressure upon the abdomen, and if this be severe and accompanied with tympanitis, it may be safely inferred that the peritoneal tunic of the bowel is involved in the inflammation, and is therefore an unfavorable symptom. If the serous coat become involved, the patient will have dyspnœa and increased prostration. The patient

will also have anorexia, which will in some instances amount to absolute loathing of all solid food, while at the same time he will be troubled with urgent thirst, the gratification of which produces tormina and tenesmus. These symptoms if not arrested still go on increasing in intensity, whilst still others are superadded, such as great prostration, feebleness of pulse, coldness of the extremitys, despondency of mind, dark and offensive discharges, the tongue becomes aphthous, hiccough sets in and death supervenes within two or three weeks after the attack.

More frequently perhaps there is a mitigation of all the symptoms, and the disease passes into the chronic form, a condition but little preferable to death itself, a result which almost inevitably follows sooner or later.

A return of health may be anticipated from a general subsidence of the symptoms, particularly a return of consistent and healthy fecal discharges. An abatement of the febrile reaction, of the pain in the bowels, tormina, tenesmus &c, a return of appetite, disappearance of thirst, and gradually returning strength, these all indicate, though not infallibly, the recovery of the patient. But instead of getting well, as this improvement in all the symptoms would lead us to expect, the patient will sometimes subside, as it were, into the chronic form of the disease, and then "Jove help him", for he is beyond the reach of physic.

Causes Dysentery is often epidemic, dependent on some peculiar condition of the atmosphere. As one who has watched the history of the disease for the past two or three

years in our own country can doubt this assertion for a moment, It has occurred at nearly all seasons, though principally in the Summer, during dry and wet weather, and in every sort of situation. It is often caused by sudden alternations of heat and cold, particularly when accompanied by excessive moisture; and the predisposition to it is greatly enhanced by long and continued fatigue. It frequently happens that whole armies will be attacked by it after marching or otherwise labouring through a hot day and then being exposed to a cold damp chilly night.

Whatever is capable of producing portal congestion will produce Dysentery, and amongst this class of Causes, and perhaps the Chief one, is malaria.

It is a well known fact that malaria produces Congestion of the Spleen, and this is often demonstrated by considerable enlargement of the organ. A slight acquaintance with the anatomy of the abdominal Viscera will enable any one to understand how Congestion of the Spleen might dam up the blood in the inferior mesenteric, and through it the hemorrhoidal veins, and thus give rise to inflammation of the parts which it is their office to drain. I fully agree with our learned and polite Professor of Theory and Practice, that this is the only mode of action of malaria in producing the disease: General Congestion of the portal system I believe to be a more potent if not a more frequent Cause of the disease than mere Splenic congestion, because the obstruction to the return

of the blood is thus much more complete and direct; the spleen being situated outside the path, so to speak, of the blood, as it seeks the liver, being sent from the colon and rectum. But I cannot agree that such congestion is the sole proximate cause of the disease. We see how it might produce such a result, and I can as readily conceive how such an effect might be produced by other causes. Can it not begin in the mucous membrane itself just as bronchitis begins in the mucous lining of the bronchia? I confess I am unable to see why such should not often be the case. Whatever is capable of giving a centripetal tendency to the fluids may produce Dysentery, not necessarily by first producing portal congestion, but the mucous coat of

the large intestines being a weak point may yield more readily to the impression of the morbific agent, whatever that may happen to be. Or it may be produced by causes acting within the bowel and directly upon the membrane; such for instance as bad food, bad wine, irritating feces &c. What it is that gives this part so decided a predominant to take on inflammation under certain epidemic atmospherical conditions, would be a fruitless enquiry. It has eluded the search of men better able to investigate the matter than I could possibly be. Dysentery was once almost universally regarded by the Medical world as being contagious, and Cullen so classed it in his Nosology; but no intelligent physician so regards it at present. These notions

perhaps arose from its occasional asso-
ciation with Syphilus, a disease acknowledged
to be contagious, a practical example of the
ill effects of keeping bad company.

Treatment. As in all the acute
phlegmasia, the first remedy in this disease is bloodlet-
ting, both in point of time and importance.
In every case where there is abdominal ten-
derness, where the patient is discharging
bloody and mucous stools, and particularly
where there is high reactionary fever, we
begin the treatment by a copious bleeding
from the arm, and this may or may not be
repeated according to the circumstances
of the case. One decided bleeding however
generally suffices. But we mus not be
satisfied with taking blood from the arm,
but we must abstract blood locally with

leeches, or with cups, if the leeches are not to be had. And we are not to be parsemonious in the use of these means, but endeavour to make a decided impression on the disease in the beginning. As Prof. Bowling says, the leeches should be scattered by handfuls over the abdomen. Having leeched or cupped the patient well we should apply warm fomentations to the abdomen, by means of flannels wrung out of warm water.

And this should be kept up as long as the soreness continues. If there be not a considerable subsidence of the symptoms, the leeching may be repeated the next day or the day after that. The next remedy mentioned in the books after bloodletting is mercury. "Mercury says Dr. Joseph Brown, "is so powerful a subsidiary of

general and local bleeding in the cure of inflammation that we should expect benefit from it in this disease; and experience proves its prudent employment to be of great service. It might be objected to, says the same author, on the same ground as purgatives, the dread of an irritating effect from it on the inflamed intestine; but the result of its employment, our only safe guide, shows the apprehension to be erroneous, provided the medicine be properly administered." We do not quote these words from Dr. Brown in order to condemn them, for we believe every word of it to be true. But the question will arise What is the proper use of mercury in Dysentery? On this subject there is a discrepancy of opinion, and we may well call in question

the propriety of administering mercury in this disease in the manner directed in the various works on practice. Dr. Brown to whom we have already alluded, and who has contributed a very good article on this subject to the Cyclopedia of Practical Medicine, directs that "a grain, or a grain and a half of Calomel combined with from five to ten grains of Dover's Powder; or half a grain of opium, or eight or ten grains of hydrargyrum cum creta, likewise combined with the opiate, may in this Country (England) be administered at intervals of four hours, the period being lengthened when the symptoms begin to abate."

Now we assert, and feel confident that the experience of the Profession in this country for a few years past

will amply sustain us in the assertion, that if the symptoms ever did "begin to abate," it would not be in consequence of such a course of treatment, but in spite of it; or else the Dysentery of England is of a very different character from ours.

What is the ordinary effect of calomel, or of mercury in any form, on the liver? Every body knows that one of its most constant and prominent effects, is to arouse that organ to increased action, and cause it to pour out a copious secretion of bile, which I believe is always more acrid and irritating, than that which is secreted in a healthy and unexcited condition of the organ. And what is the effect of all this? Why this acrid bile as a matter of course passes along down

the alimentary tract and over the inflamed mucous surface, and adds to the mischief already existing there. I have often seen this effect produced by the use of mercury, and in fact have never known it to fail of this effect when given as directed by most authors whom I have consulted.

The question will occur then, must mercury be entirely excluded from the catalogue of remedies in the treatment of Dysentery? We answer that it may often be used with benefit, but that it had much better be withheld entirely, than given injudiciously; and such I am compelled to regard the usual mode of administering this drug. Dr. Brown's plan to which I have already alluded, I cannot regard in any light than, as highly pernicious.

How then is it to be given? This question may be more conveniently answered in connexion with another mooted point, (viz) should purgatives be administered at all in Dysentery?

It is a fact generally recognised I believe, that in this disease the cells of the Colon are always more or less filled with Scybala, and it is proper that these should be removed; for it is impossible for them to remain there, without creating more or less irritation, or adding to that already existing. According to Dr J. Bowling's authority, whenever these Scybala begin to come away from the patient, he invariably begins to get better. These hardened lumps of fecal matter must be got rid of then. How is this to be done?

It happens very fortunately that we have a medicine that has a peculiar tendency to act on the large intestines, and this medicine is aloes; an article therefore of all others, best suited to the treatment of this disease. Aloes, says Prof. Bowling, should enter into and form the base of every purgative employed in Acute Dysentery. Having, as already remarked, a peculiar tendency to the large bowels, it dislodges and carries off any scybala that may have accumulated in the cells of the Colon; and as these often become a secondary source of irritation, their dislodgment and removal becomes an important indication in the treatment of the disease.

The following is the recipe for Prof. Bowling's Dysentery pill, which in

our opinion is a peculiarly happy combination of medicines calculated to fulfil all the indications of a cathartic in this disease.

℞ Aloes pulv.
Scammony pulv.
Blue Mass āā ℥ss M
Make into twenty pills.

Of these he administers from three to six, according to circumstances. They should, if the first dose does not produce the desired effect, be repeated on the next day or the day following that. This cathartic will sweep out the whole alimentary canal bile, scybala, and all. This in a large majority of instances will be purgation sufficient; and after thus cleaning out the bowels I should be inclined to let the

patient rest. and to promote this object I would administer opium in considerable doses. If on the decline of the disease it should be necessary to open the bowels again, it may be done with a dose of castor oil, and fifteen or twenty drops of the oil of turpentine.

Turpentine is used by some practitioners throughout the disease, and with asserted success. It may perhaps act very kindly and beneficially on the inflamed mucous membrane if judiciously employed, and in a few cases in which I have tried it, I was pleased with the effects of the medicine. Diaphoretics are prescribed in most of the books, and by promoting the action of the skin, and thereby giving a centrifugal tendency to the fluids they

may do good. The preparations of antimony, particularly the tartrate, are usually employed for this purpose; but its tendency to purge I think is an objection to its use, and when used should be carefully watched, and withdrawn as soon as it begins to manifest such a tendency.

I think it would be better to combine opiates with it to control its action in this respect. To make a brief Summary of the remedies in the treatment of this disease, we need only to mention General and Local Bloodletting, Warm fomentations, an Aloetic purge and Opium. These if properly used will be sufficient for the management of most cases.

We have not deemed proper to

speak of the Diagnosis of the disease, or any other modes of treatment, than the one so briefly sketched above. We omitted to speak of the first because we believed it to be unnecessary to an easy recognition of the disease; and the latter because we believe the plan of treatment we have indicated, to be the best, and therefore the only proper one to be employed.

We take leave of the subject with the single remark, that, although the sketch we have given of the disease is deficient in many respects, and possibly erroneous in some, yet sufficiently correct and full, both as regards the disease and its treatment, to enable the reader, should he be guided by it, to detect the disease and cure it.