AN

INAUGURAL DISSERTATION,

ON

Acute Dysentery.

SUBMITTED TO THE
PRESIDENT, BOARD OF TRUSTEES, AND MEDICAL FACULTY
OF THE
University of Nashville,
FOR THE DEGREE OF
DOCTOR OF MEDICINE.

BY

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Perry, Tenn.

1855

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Acute Dysentery.

Dysentery may be defined in general terms to be inflammation of the mucous membrane of the large bowels. It is true that in order to constitute a case of dysentery, it is not necessary that the whole tract of mucous surface from the ileocecal valve to the anus should be inflamed, but we cannot have dysentery without inflammation somewhere within those limits. The rectum and descending colon are the parts most generally involved, though the disease may, and often does extend itself along the transverse and ascending colon and implicate the parts about the ileocecal valve itself. In protracted cases the submucous cellular tissue, and
muscular coat of the bowel may become involved, and occasionally all the tunics of the bowel are eroded by ulceration, permitting the escape of fecal matter into the cavity of the abdomen. But in the form of the disease of which we are treating, the inflammation seldom extends deeper than the mucous membrane. This disease is characterized by bloody evacuations, attended with gripping pains in the lower portion of the abdomen, more or less tenderness on pressure and frequent desire to go to stool. The discharges consist of blood and mucous, sometimes wholly of blood; or in milder cases simply of mucous. They are small in quantity, very frequently (indeed we might say generally) containing no fecal matter, and accompanied with
tenesmus and griping. The discharges are not always of this character from the beginning, however. The disease may begin with simple diarrhoea in others, and perhaps the largest number of instances, the dysenteric symptoms are preceded by a constipated condition of the bowels. As the disease advances these griping pains become more excruciating; the tenesmus is augmented, and the desire to go to stool becomes incessant. The sporadic form of the disease is usually mild and unattended with danger; but when it assumes the malignant epidemic form, it is one of the most distasteful and fatal complaints that human flesh is heir to. The pains in the lower part of the bowels, to which we have
already alluded as characterizing to some extent the disease, come on irregularly, sometimes with intermissions of an hour or more, and accompanied with an urgent desire to evacuate the rectum, while that attempt to do so results in the discharge of a small quantity of blood and mucus mingled together. This perhaps more or less completely relieves the patient of this termia, and the burning, burning sensations about the anus, but both return with renewed violence very soon, unless the proper measures have been put in requisition to subdue the inflammatory process going on in the bowels. The patient will complain of weight and burning sensations in the abdomen. In protracted and severe cases these symptoms are
aggravated, the discharges consisting almost entirely of blood, instead of mucous and feculent matter tinged with blood. The tenesmus becomes exceedingly painful and distressing, the patient having a sensation as if the bowels themselves were about to be discharged. Fever, if it has not been present from the beginning, is now superadded to these symptoms; the pulse is hard and generally frequent and small; the tongue is covered with a whitish mucous fur; or it is dark and dry; the urine is small in quantity, high colored and often passed with difficulty. Under this state of things, if suffered to continue, the patient's physical powers are generally exhausted, and he sinks.
worn out with the harassing nature of his symptoms. It not infrequently happens that towards the termination of these severe and protracted cases, that typhoid symptoms come on, from which the patient seldom recovers. The violent straining sometimes produces prolapse of the rectum, more frequently however in children than in adults, from the greater development of the muscular system in the latter. Though the discharge may continue for several days of pure blood, as observed by some authors, they are apt eventually to exhibit shreds of mucous mixed with blood, and frequently about this stage of the disease, we may observe small
hard lumps of fecal matter termed
scybala, which have a very offensive
diver odor. Except in the mildest
cases there is more of left febrile
excitement, indicated by the hard-
ness and frequency of the pulse,
eght and dryness of the skin. 
Sometimes the secretions of sial and
delirium are notably diminished, and
not infrequently the edges of the
lungs present a violet hue. As
the disease advances towards a ful-
ter termination, the countenance 
becomes shrivelled, the patient la-
bores under mental aberration,
and finally yields under the weight
of his malady, and sinks into the
arms of death. Restoration is
Health is indicated by an abatement of the symptoms, such as an improvement or return of the appetite, a decline of tenesmus, subsidence of fever, and above all the appearance of natural discharges from the bowels. If to these evidences of convalescence there be added a cleaning off of the tongue leaving it moist and natural and a cheerful condition of the patient's mind, recovery may with much certainty be predicted. But our prognosis should be guarded even under this favorable state of things, for instead of recovering, the patient may slide into the chronic form of the disease, from which it is barely
It is possible he will ever emerge.

Anatomical appearances.

The mucous membrane of the colon cæcum and rectum in persons who had died of dysentery, as observed by Doctors Bell and Stokes, presented the following lesions viz. inflammation, ulceration and sloughing or mortification. But these appearances are not to the limits above mentioned. By an extension of the inflammation the other coats of the bowel may become involved, and the meso-colon, mesentery and rectum are frequently found to present the evidences of inflammation. If the venous coat of the bowels be implicated, adhesions may take place. These adhesions may occur between different
Portions of the bowel, or between the viscera and the surfaces of the abdomen.

The pathological appearances are very various and without attempting a detailed account of them, we deem it sufficient to say that the essential anatomical changes are those of inflammation of the mucous membrane of the large intestines and such as would result from an extension of the disease to the other surfaces of the bowel and to contiguous surfaces.

Causes: All authors, so far as we have been able to consult them, concede in the statement that great and sudden alterations of temperature are one of the most prolific causes of dysentery. Hence the disease is the
"Fruit of tropical climates," where the inhabitants are exposed during the day to the powerful and scorching rays of the vertical sun, and at night to heavy and chilling dews. And in milder climates the same cause operates, though to a more limited degree, during the latter weeks of summer and the beginning of autumn, the season of the year into which this disease usually prevails in temperate latitudes.

Malaria has been accused of causing dysentery, and there is good reason to think the allegation true. The disease prevails in climates and localities and seasons favorable to the development of malarial diseases. Not infrequently it is found
Associated with intermittent and remittent fevers, and then again it seems to succeed or supplant them, as if it were produced by a continuation of the same noxious agent, more or less changed in its nature, or extrinsically modified in its effects. All observers from Sydenham down to the present day, have noticed this relationship between dysentery and malarial fevers. Attempts have been made to account for the production of dysentery by malaria on physiological principles; or perhaps it would be more correct to say anatomical principles, since physiology is concerned in the production and maintenance of health and not of disease. But to the theory.
It is said that the operation of Malaria upon the system produces congestion of the Spleen, and as the veins which return the blood from the rectum and descending Colon, viz. the hemorrhoidal and inferior mesenteric, pour their contents into the splenic vein, any obstruction in the spleen will dam up the blood in them and produce inflammation in those parts which it is their duty to drain; therefore, and in this way Malaria produces dysentery. Although we admit Malaria may and often does produce dysentery, we cannot agree for a moment that the mechanical mode of action, which we have so briefly stated, is correct. We shall have to be shown in the first place how a damming up of blood...
in the spleen would interfere with the passage of blood through the splenic veins. It would be just as plausible to contend that a dam thrown across the Ohio rivers at Louisville or Cincinnati would give the dwellers on the banks of the Cumberland or Tennessee, the advantage of slack water navigation, as to contend that mere congestion of the spleen will produce congestion and consequent inflammation of the parts so remotely connected with it. Again an anatomist tells us that there is a free anastomosis between the hemorrhoidal veins and the branches or radicles of the internal iliac veins, and it seems probable that if the blood was obstructed in its passage through the splenic veins, the internal
illes would perform a part of the duty of the hemorrhoidal veins, and thus relieve them of congestion. Furthermore, this theory does not account for the inflammation in the transverse and ascending colon, since their blood does not pass through the splenic vein, on its way to the liver. Lastly, if this doctrine were true, the stomach ought to suffer as often to the same extent, and under the same condition of things, as the rectum and colon, for it empties its blood by means of the gastric veins into the splenic, at or near the same point at which these portions of the large bowel discharge theirs. These facts make it plain we think that the mechanistic theory of the cause of dysentery will not stand the test of reason and common sense.
and we therefore dismiss it without further notice. Living in low and damp situations, in crowded and ill-ventilated rooms is also a frequent cause of dysentery. Hence it often prevails in large cities, where the poor occupy filthy cellars in which great numbers are crowded together, and compelled to breathe over and over again the same vitiated atmosphere, to subsist upon insufficient and unwholesome food, and imbibe the poisonous exhalations to which such conditions must necessarily give rise. Bad food, the abuse of spirituous liquors, and indulgence in vitiated wines, are mentioned by authors as causes of dysentery. It is a difficult matter however to assign these various agencies their proper share in the production of this disease.
In many of the older books we find contagion put down as a cause of dysentery, and in Bellin's nosology, contagious pyrexia is made one of the characteristics of the disease, as it had been an undisputed point in his time. There is a vestige of this belief in the popular mind to this day. Modern authors however are unanimous in repudiating this notion. The error probably arose from the occasional association of dysentery with dyspepsia, observers attributing to this affection a property that rightfully belonged to one of its ordinary complications. In addition to what we have already said a remark or two in regard to the prognosis may not be out of place here. When the disease is about to terminate favorably, the pain
outside, the stools become more consisting, less frequent and of a dark and bilious character. The distressing tormina and tinesmus are diminished. The tongue begins to put off its coat and to assume a healthy appearance, the skin grows moist and of a natural temperature, and feels pleasant to the touch. Febrile symptoms depart, and leave the patient in a state of slow convalescence. If a fatal termination may be anticipated if the tenderness on the prepore becomes severe and aggravated, and associated with a tympanitic condition of the abdomen. The pulse will be frequent, feeble and irregular, and the extremities cold. If to these ill omens be superadded involuntary
discharges from the bowels, delirium and hicough, death will soon close
the scene. As we have already
remarked the disease is usually
mild and manageable, when it is of
a sporadic character. But if it occurs
as an epidemic, and prevails in low,
lump and malarial districts, it will
give no more concern as to its Termi-
nation, and more perplexity in the treat-
ment. In such situations, and during
the seasons in which autumnal and conti-
nued fevers prevail, it is often complicated
with these diseases, and of course requires
a corresponding modification of treatment
while it adds largely to the gravity of the
disease. Different meth-
ods of treatment have been suggested
by different authors each claiming for
his own, superiority over all others, and
as it was long ago said or sung that
"When Doctors disagree,
Disciples then are free."
we shall without presuming to suggest
anything new or novel, succinctly state the plan
of treatment, which in our judgment is best
adapted to the cure of this disease. If called
[to treat] a patient laboring under agery of in
its acute stage, and finding the pulse full
and corded, the skin hot and dry, and the
discharges consisting of purer blood, and
especially, if the epidemic or constitution of the
atmosphere were not such as to forbid it, we
should in the first place subject him to an
effective bleeding, and then apply leaches co
fiongly over the abdomen, and especially
over that portion of it, which evinced pains on pressure. If lumbes were not to be had we should try what virtue there is in cups. In the absence of constitutional reaction, or if there were much depression of the vital forces, we should content ourselves with topical bleeding. In addition to this we would direct warm fomentations to be kept constantly to the bowels. It might not be necessary to repeat the local abstractions of blood according to the success or failure of the first use of the remedy, in conjunction with other means (presently to be mentioned) in arresting the progress of the disease. As to internal remedies, it is proper in the majority of instances to commence the treatment with a purgative that will cleanse out the large intestines. For this purpose a combination of aloes, senammony, and blue meps as recommended by Prof. Bowling will answer as well as any other. A purgative of this
character is particularly required if a constipated condition of the bowels existed previous to the attack. Having thus unloaded the large bowels of the collections of hardened feces that have accumulated in them, we should endeavour to bring the bowels into a state of rest and quietude by the administration of opiates. These should be given in doses sufficiently large to allay the enuresis and term ina, and this condition should be maintained until inflammation has subsided to such an extent as no longer to demand them. Occasionally it may be necessary to give a gentle purgative to carry off the irritating perspirations that may have accumulated in the bowels, and nothing will answer this purpose so admirably as the following mixture. Recipe: Castor Oil—3 zt. Oil Turpentine—3 zt.
Dau danum 3/4 Drk—1 tablespoonful
To be given every eight hours until a gentle action of the bowels is produced. The practitioner should not lose sight of the fact that the too liberal use of opium may so mask the symptoms of the disease as to induce a careless and inexperienced observer to imagine the patient improving when in fact the inflammation is doing much and it may be irreparable mischief in his bowels. It is better therefore, in order to avoid such a result, to defer the use of opium until the more prominent symptoms have been made to disappear under those of the antiphlogistic measures already mentioned. We believe the plan of treatment already indicated, if properly carried out, will suffice in a large majority of instances. If the disease be complicated with disease of the liver or portal congestion, it may be necessary to administer mild
Mercurials combined with the compound powder of ipeworka, otherwise we believe their use positively contra indicated. The warm bath frequently produces a tranquilizing effect upon the system, and gives much relief to the tenesmus and tenesmus.

Dover's Powder is a preparation of great value in this disease, combining as it does with what we consider a sinuousness in the treatment. Wet opiates, with a medicine that acts most benignly on the cutaneous surface. It may often be substituted for the pure opium, and always beneficially combined with it. The diet should of course of the lightest and least irritating character. Barley water or gruel should constitute the chief articles of food during the
first stage of the disease. After the third or fourth day provided the inflammatory symptoms do not run too high, a little mutton or chicken broth may be allowed. Besides furnishing the necessary nourishment to the patient, these articles have a soothing effect on the irritated mucous surfaces. When more nutritious diet is demanded, well boiled rice may be substituted. The return to the ordinary diet of the patient should be very gradual and cautious.
We deem it unnecessary to enlarge farther on this part of the subject as this paper is not designed to reflect the views of the profession at large but simply to give an outline of the disease and the means which in our humble judgment are the best adapted to its cure. Having done this though in a very imperfect way and conscious of the little ability displayed in its preparation we resign it to its fate hoping that those into whose hands it is destined to fall.
Will not view it with a critic's eye
But past its imperfections by.