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AN

INAUGURAL DISSERTATION,

ON

Acute Dysentery.

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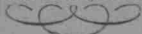

Acute Dysentery.

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 constitue a case of dysentery, it is not necessary that the whole tract of mucous surface from the illeo-coecal 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 illeo-coecal 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 griping 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 distressing 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 the attempt to do so results in the discharge of a small quantity of blood and mucous mingled together. This perhaps more or less completely relieves the patient of this tormina, and the ~~harassing~~ burning sensation 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 the 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 coloured 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 unfrequently 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 prolapsus 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 mucus 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 odor. Except in the mildest cases there is more or less febrile excitement, indicated by the hardness and frequency of the pulse, & heat and dryness of the skin. Sometimes the secretions of bile and saliva are notably diminished, and not unfrequently the edges of the tongue present a violet hue. As the disease advances towards a fatal termination, the countenance becomes shrunken, the patient labours under mental aberration, and finally yields under the weight of his malady, and sinks into the arms of death. Restoration to

health is indicated by an abatement of the symptoms, such as an improvement or return of the appetite, a declension 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 patients 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 _subside_ as if it were, into the chronic form of the disease, from which it is hardly

possible he will ever emerge.

Anatomical appearances.

The mucous membrane of the colon coecum and rectum in persons who had died of dysentery, as observed by Doctor's Bell & Stokes, presented the following lesions Viz inflammation, ulceration and sloughing or mortification. But these appearances are not confined 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 serous 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 parietes 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 tunics of the bowels and to contiguous surfaces.

Causes: All authors, so far as we have been able to consult them, concur in the statement that great and sudden alterations of temperature are one of the most prolific causes of dysentery. Hence the disease is the

"pest 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 in 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, localities and seasons, favorable to the development of malarial diseases. Not unfrequently it is found

associated with intermittent and re-
mittent fevers; and then again it seems
to succeed or supplant them, as if it
were produced by a continuance of
the same morbific 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 be-
tween 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 produc-
tion 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 daming up of blood

in the spleen would interfere with the passage of blood through the splenic vein. It would be just as plausible to contend that a dam thrown across the Ohio river at Louisville, or Cincinatti 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 anatomist tell 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 vein, the internal

iliacs 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 it's blood by means of the gastric veins into the splenic, at or near the same point at which these portions of the large bowels discharge theirs. These facts make it plain we think that the mechanical theory of the cause of dysentery will not stand the test of reason and common sense.

and we theirfore dismiss it without further notice. Living in low and damp situations, in crowded and ill ventillated 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 breath over and over again the same vitiated atmosphere; to subsist ~~up~~on insufficient and unwholesome food, and imbibe the poisonous exhalations to which such a condition 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 Cullen's nosology contagious pyrexia is made one of the characteristics of the disease, as if 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 typhus, 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 pains

subside, the stools become more consistent, less frequent and of a dark and billious character. The distressing tormina and tenesmus 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. A fatal termination may be anticipated if the tenderness on pressure 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 hiccough, 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, damp and malarial destricts, it will give us more concern as to its termination, and more perplexity in the treatment. In such situations, and during the seasons in which autumnal and continued 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. ~~Treatment~~. Different methods 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 judgement is best adapted to the cure of this disease. If called to treat a patient laboring under dysentery in its acute stage, and finding the pulse full and corded, the skin hot and dry, and the discharges consisting of pure blood, and especially, if the epidemic 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 copiously over the abdomen, and especially

over that portion of it, which evinced pain on pressure. If leaches were not to be had we should try what virtue there is in cups. In the absence of constitutional reaction, or if there was 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 or might not be necessary to repeat the local abstraction 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 premise the treatment with a purgative that will clean out the large intestines. For this purpose a combination of aloes scammony and blue mass 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 tenesmus and tormina, 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 secretions that may have accumulated in the bowels; and nothing will answer this purpose so admirably as the following mixture. Recipe Castor Oil - ℥ij

Oil Turpentine - ʒij

Laudanum ℥ʃ Mix — A 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 opiates may so mask the symptoms of the disease as to induce a careless or, an inexperienced observer to imagine the patient improving ~~and~~ 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 the use 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 ipecacuanha; 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 tormina and tenesmus.

Dovers Powders is a preparation of great value in this disease, combining as it does with, what we consider a sine-qua-non in the treatment. Viz: opium, ~~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, be 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 re-
flect the views of the profes-
sion at large but simply to
give an outline of the dis
ease 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 concious of the little abil-
ity displayed in its prepara-
tion we resign it to its fate
hoping that those into whose
hands it is destined to fall.

Nov 27/[illegible]

Will not view it with a
critics eye
But pass its imperfections by.