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AN

INAUGURAL DISSERTATION

ON

Acute Peritonitis.

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Acute Peritonitis

This disease is sometimes ushered in with a chill, followed by a high, reactionary fever, but perhaps, more frequently, great pain in the abdomen is the first symptom, and especially is this true, when the peritonitis is caused by effusions into the cavity, or wounds of the peritoneum. The pain is very sharp and severe, and almost intolerable, and is described as of the grinding or cutting kind; It is not limited to one spot, but is diffused over the whole surface. The patient cannot sit up, nor lie on either side, but lies on his back, with the legs drawn up, so as to take off the pressure of the viscera, as much as possible from the inflamed membrane. The pain is greatly increased, if the patient sneeze or cough, or draws a long breath. The abdomen is always very tender to the touch, and the patient

shrinks in apprehension, as the physician approaches his bed side, to make the necessary examination. The descent of the diaphragm in inspiration, gives so much pain, that the patient breathes only with the ribs, hence the phenomenon of thoracic respiration. As the body cannot be moved, he is constantly throwing his arms about, and the features are expressive of a peculiar anxiety. The respirations are from forty to sixty in the minute. The parietes of the abdomen are hard and elastic, and later in the disease we have all the symptoms of a tympanitic character. There is nausea and vomiting and the latter is often very troublesome on account of the concussion it produces. It is thought, that when vomiting occurs in peritonitis, that the peritoneal covering of the stomach is inflamed. such is the case

I have no doubt, but it is my opinion that we have vomiting, even when that covering is not inflamed. because of the extensive sympathy which exists between the peritoneum and stomach. and I think we may account on the same principle, for the suppression of urine that we often have in this disease. The pulse in the commencement is hard and full, ranging from one hundred, to one hundred and thirty in the minute. but after a short time the pulse becomes hard, tense, and wiry. The bowels are almost always constipated. though Authors tell us, when the peritoneal and muscular coats of the bowels, are implicated, we may have profuse diarrhea. After the disease has lasted a short time, we may hear a friction sound similar to that observed in pleurisy. caused by the rubbing of the two surfaces of the membrane

together. What variety of peritonitis which result from wounds of the peritoneum, and perforation of the stomach or bowels, is characterized by the suddeness of its attack, the pain springs up in some portion of the abdomen, almost like magic, and is quickly spread over the whole cavity; In such cases the patients mostly die, in spite of all our means to the contrary. The course of peritonitis is run, usually, in a very short time, in a majority of cases in from three to six days. An aggravation of the symptoms above mentioned, indicate an advance in the disease, and vice versa. Towards the last, (in a fatal termination) there is often a sudden diminution of the swelling and pain, which is a most unfavorable symptom, without the concurrence of other symptoms for the better, and we might conclude that our patient is better,

when in reality, he is on the verge of dissolu-
-tion. About this time, the pulse is feeble and
thread like, and the features have a cadaverous
expression. Dr Watson says the patient dies
by Asthenia, death commencing at the heart,
There are some few cases in which the disease,
makes its progress insidiously, and continues
to advance in the almost unconscious patient
until symptoms supervene, denoting a fatal
issue, cases of this kind however, are mostly in
those of a weak and debilitated constitution.
Of a variety of this disease known as puer-
-peral Peritonitis. I shall make no remarks
considering, the subject under consideration,
as much as I can do justice to.

Causes. The causes of Peritonitis, may
be considered under two heads. viz exciting
causes, and mechanical causes. they are both
numerous and various. and under the first

head may be enumerated. atmospheric vicissitudes producing cold, Intemperance, Metastasis of Gout and Rheumatism, sudden suppression of habitual discharges, extravasation of blood, pus, urine, bile, and the contents of the alimentary canal, all of which are potent agents in the production of this disease. Under the second head may be enumerated. tapping the abdomen as in dropsy, Strangulated hernia, also the operation for the cure of that disease, with the various wounds of the peritoneum, such as gunshot wounds. incised wounds. blows &c.

Anatomical Characters. Alike all serous membranes. the peritoneum is very liable to inflammation. Although in the natural condition of the peritoneum, we cannot detect any vessels that carry red blood. yet in the progress of the inflammation, all

the vessels, that before carried only the white globules of the blood, enlarge considerably, and then the red globules are forced in these small vessels, which give to the membrane a red appearance. and of course it is reddest where the inflammation is most intense.

The inflammation tends to the effusion of lymph and of serum, The lymph is very adhesive, and in many instances, the opposing surfaces of the membrane are agglutinated together, so as to form partial attachments, and in some cases, the peritoneal cavity is entirely obliterated. On a post mortem examination, we find the peritoneal sac more or less filled with serum. it is found in the convolutions of the intestines, and in larger quantities in the pelvis, Very often there is commingled with the serum, pus, and flakes of fibrin may be seen floating

on its surface. which renders it turbid or milk like. and sometimes as is the case. when blood is effused, it is red more or less according to the quantity of blood poured out. When there is a perforation of the Stomach or bowels, we will often find portions of undigested food and feces, in the peritoneal cavity. Gangrene is very seldom observed in fatal cases of Peritonitis, because the disease runs its course in such a short time, that gangrene is not suffered to take place. although in some cases it does occur, as in strangulated hernia, and that in a very short time.

Diagnosis. Generally speaking the diagnosis of this disease is not very difficult, especially when it is not complicated with any other disease, The membrane may be inflamed by a continuation of the inflammation from

other parts, such as the Uterus, Bladder Stomach, and Intestines. when this is the case we must be very guarded in our diagnosis, or it may only be that portion of the membrane that invests an organ. and that renders the case still more difficult. but as I have said, when there is general diffused inflammation, there is no great difficulty in the diagnosis, It may be distinguished from Colic, by the great tenderness on pressure, which in colic is relieved by pressure. the pain in Peritonitis is persistent, while that of Colic is paroxysmal, the patient in peritonitis. lies very still and in a peculiar posture. while in Colic he is twisting and screwing himself in every conceivable manner. and to complete the difference, there is the friction sound heard in this disease, which is never heard in Colic. To distinguish the disease under consideration, from Gastritis

and Enteritis, is most generally easy, there is greater pain and tenderness, the bowels are much more inclined to constipation, and by its much greater effect upon the constitution generally, than either of the above mentioned diseases.

Treatment. It will appear to every observing man, very evident, that an inflammation which advances so rapidly through all of its stages, as the one now under consideration, will require very active means to subdue it. And the man who is timid, and fearful of resorting to active measures, will often have the mortification of seeing his patient die, on account of his feeble and irresolute practice. but it is a disease notwithstanding the most active treatment, will often rapidly advance through all of its stages, and finally terminate in death; So it is all important, that

we commence the treatment early in the disease, and as I have remarked this treatment must be prompt and energetic. As there is a high state of inflammation, we must employ means for the purpose of reducing this excite-
-ment. and without a doubt, the lancet here, is the great sheet anchor of our hopes. The blood should be abstracted freely, and also from a large orifice. The patient should be placed in the sitting or standing posture if possible, and bleed until there is unmistakeable evidence of its effect upon the system. If in the course of a few hours, there is a febrile reaction, we should bleed again and again, for it is of the utmost importance, to subdue this inflammation at the outset. After this is done, we may literally cover the abdomen with leeches, from fifty to

one hundred, will not be too many, in violent cases. then flannels wrung out of warm water should be applied, so that the leech bites may be encouraged to bleed. Now we want remedies that will tranquilize the system, and reduce the fibrin of the blood, and what remedies will more effectually answer these ends, than calomel and opium. ℞ They should be given in conjunction, three or four grains of calomel, and from two to six grains of opium, every four or six hours. It is much better in my estimation, to pursue this plan, than to give drastic purgatives, as was done by the older Physicians. The peristaltic action of the intestines, excited by these purgatives, added fresh fuel to the flame, which was already burning with sufficient velocity, as to require the most active means for its subjugation. If when we have used

this strictly antiphlogistic plan, the disease continues to advance in defiance of our means, we should put on a large blister, sufficient to embrace the whole anterior surface of the abdomen. and after it has drawn well, we should spread some irritating substance on the denuded surface, so as to keep up a continual discharge.
This treatment will be very applicable to the variety known as the Idiopathic, and also that which arises from wounds, but in that variety which arises from a perforation of the bowels, it is totally inapplicable, because this perforation is always the consequence of some slow depressing disease, and the patient is already worn down and exhausted. The proper treatment in such cases is to allay the pain by opium, in very large doses. It is true that there are instances on record, where the

patients have recovered. but as a general rule, all we can do, is to smooth the rugged path-way to the grave. This is the treatment pursued by Mr Bowling, and I heartily adopt it as the most reasonable course that could be pursued. In the latter stages the patients strength should be supported by stimulants. such as wine. brandy, carbonate of ammonia &c. If he could bear it. we may allow him the use of nutritious food, such as beef tea, chicken water, soft boiled eggs & and if the stomach is very irritable. we should use means to overcome this if possible.

Mr Wood after bleeding both general and local. recommends from five to fifteen grains of calomel, followed in six or eight hours by Castor Oil or the Sulphate of Magnesia, or the infusion of senna with salts. whichever may be most easily retained by the stomach.

so that a thorough evacuation of the bowels may be produced. but he says it is not desirable, to push purgative medicines actively. After this he reccommends calomel and opium in small doses. and if a determination to the surface be desirable. ipecacuanha may be usefully added; If after this, the disease is not tractable, he believes in putting the patient fully under the Mercurial impression. Mr Watson pursues very nearly, the course recommended by Mr Bowling. the treatment consisting of bleeding both general and local, with fomentations, calomel. opium, and mercurial ointment rubbed in upon the groins axillae &c. Most of the writers, whose works I have read, reccommend purgatives in peritonitis as highly beneficial, but I cannot believe, that the good that are calculated to do as antiphlogistic remedies, can be put in competition, to the harm.

they may do. by increasing the peristaltic action of the bowels, and in that way causing additional friction and tension to the inflamed membrane. one great object is to keep the membrane as quiet a possible during the treatment. The good effect of opium in this disease cannot be commented on too much. for we have numerous instances on record, where patients have been snatched from the very jaws of death, by this excellent drug. Several cases have been treated by Drs Stokes & Fergusson, in giving heroic doses of opium. in one instance, the patient took 105 grs, besides what was administered in injections, the patient recovered. I have not treated of this subject so fully as it deserves, but have presented the most prominent and important points, having endeavored to abbreviate as much as possible, for I am averse to writing a long Thesis.