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INFLAMMATION OF THE INTESTINES.—TREATMENT.

From Lectures on the Theory and Practice of Medicine, at University College, London, by
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CONTINUING the subject of inflammation of the intestines, it may be remarked that in enteritis, there is not only severe pain with obstinate vomiting and a complete suspension of the functions of the stomach, as in gastritis, but there is likewise an obstruction to the passage outwards, of the contents of the bowels; there is obstinate constipation. Enteritis is, generally, more or less attended with hepatic derangement: and, hence, it is necessary, besides antiphlogistic measures, to employ remedies to relieve the liver; besides general and local depletion, mild mercurials combined with antimonials in small doses, sedatives and saline medicines.

In enteritis, it is the business of the medical man to ascertain the causes of the disease: whether it may depend upon obstruction which surgical aid can relieve. You must remember that many of the symptoms of enteritis resemble those of strangulated hernia, and the one may be confounded with the other. Therefore, it is of great consequence to be perfectly assured whether there is hernia or not. As I before mentioned, the symptoms of hernia may arise from an accumulation of *fæces* causing an obstruction to the passage of the food; or they may depend on inflammation itself; or the bowels may be incapacitated for action by spasm or paralysis; or again we may trace these effects to mechanical causes. It not unfrequently happens that, after the disease has existed for some time, a sort of stricture is produced in a part of the intestine, under the influence of inflammation, without total obstruction. Internal hernia takes place from adhesions between the omentum and the intestines, or between one intestine and another. It is impossible to distinguish between these cases during life, because the existence of any such cause of obstruction must materially interfere with the restoration of the intestine to the natural condition. The treatment of enteritis must be antiphlogistic, combined with medicines calculated to ensure the opening of the bowels. Bloodletting may here be carried to a greater extent than in gastritis, as, in the early stage of enteritis, there is less prostration of strength, and less disposition to sinking. Leeching should be combined with bloodletting, and also poultices and fomentations to the abdomen. If the inflammation continues long, and the pain is excessive and unremitting, the

use of calomel may be resorted to. If the disease has been but of short duration, and has lasted only a few hours, or is of a less severe form, it is better to begin with a dose of calomel, to secure evacuation of the bowels, before the antiphlogistic measures are tried; but if the disease is of longer standing, it is better to use the antiphlogistic treatment, first, and then follow with purgatives, &c. Of all the purgatives that I could name, I do not know of any that can be put in comparison with calomel; and for this purpose, it should be given in pretty considerable doses, of from five to ten grains, combined with James's Powder, and with sedatives. Opium has been recommended to deaden the inflammation, but its effect is to interfere with the peristaltic action of the bowels, and block up the secretion from the liver. I therefore prefer using conium, which is more soothing; five grains, or even more, should be given with the calomel. belladonna answers the same purpose. The dose may be repeated in three hours if it does not operate; and after this, injections of castor oil—three or four drachms—mixed with a little gruel or the yolk of an egg, or something of that kind, should be used to promote the action of the bowels. If the bowels are not opened by these means, more active aperients may be tried, and it may be expedient to use a few doses of croton oil. In combination with this antiphlogistic treatment, turpentine may sometimes be used with success. Frequently it happens in these cases, that there is a great deal of spasmodic action, but whether such is the case or not, turpentine does not appear to be so injurious a medicine in intestinal inflammations, as one might be led to expect. By some it is considered to be an antiphlogistic remedy: it is certainly remarkable how it tends, in some cases, to the dissipation of the symptoms and products of inflammation. Sometimes it is used in peritonitis, under the supposition that it is antiphlogistic. At any rate, in the form of an injection it answers very well, and relaxes the spasm.

If all these measures fail, the best thing to resort to, for the purpose of exciting the action of the bowels, is the tobacco injection; no permanent relief can be obtained until this action is effected. The mode of application is, a scruple of tobacco infused in half a pint of water, and the injection to be retained for ten minutes. Some persons recommend the smoking of tobacco as being effectual; it certainly is very easy of application. The greatest exertions should be employed to open the bowels, for, when this is effected, a great part of the battle is gained; we should scrupulously look to this object, and not be content until it has been effected. The remedial measures must be repeated again and again. After the bowels have been freely opened, then comes the time for opium; it is of great efficacy and utility then, and it may be advantageously combined with mercury; or if opium cannot be borne, morphia may be given; the object being to remove the effects of the inflammation. The reason why opium is used, is that it tends to bring the intestines into a quiescent state; they are unhealthy, and are highly irritable, and this constant irritation gives them an undue action; and there is very apt to occur, after the constipation has been overcome, diarrhoea accompanied by great prostration of strength. It may also be necessary to use

fomentations and blisters, where there is considerable pain and tenderness of the abdomen. If the parts feel raw and sore on the passage of the feculent matter, the local antiphlogistic treatment must be continued, so long as these sensations remain.

In frequently happens in enteritis, that, besides tympanitic distension and obstruction, in the early stage, there is a hardness in some parts of the abdomen, a feeling of induration communicated to the touch. Usually, however, there is great soreness and tenderness felt, more commonly in the left iliac region than elsewhere. It appears to me that this must be the result of the internal thickening of the intestine; and so long as it lasts, there is a great tendency to the recurrence of the obstruction; and it is necessary to be extremely careful to administer medicines from time to time, to keep up the regular action of the canal. The best medicines, for this purpose, are castor oil, or mild salines, as sulphate of potash, and sulphur. Castor oil is the safest of all medicines. It is of very great consequence, after an attack of enteritis, to avoid exertion too early, and particularly to avoid any error of diet, and the use of any irritating medicine. The great reason of this precaution is that there is a considerably impaired state of the functions of the canal, and so long as this is the case, all irritating things tend exceedingly to produce a relapse. The diet should be as plain, mild and simple, as possible; chiefly consisting of farinaceous articles of food.

We now come to the *sub-acute form of gastritis*. This form of disease of the mucous membrane is often attended by gout or erysipelas, and is manifested by pain and tenderness at the epigastrium, with nausea and sometimes vomiting. The tongue is at times red, and at others of a dark purplish-red color, with a slight white fur in the centre. Sometimes there is thirst, but the fever is slight, and the pain not always considerable. It is, however, increased by eating, and drinking particular kinds of liquids. There is, frequently, in connection with this state of irritation and continued constipation, a degree of hæmatemesis present. This form of the affection is slight, and if treated in time may give way easily under moderate antiphlogistic treatment. Gastritic affections sometimes occur at the outset of eruptive fevers, and subside as the eruption comes on. It appears that, in these cases, the inflammatory action passes down the intestines, affecting the follicles or glands; but where it occurs independently of fever, this slight form readily gives way to mild mercurials, followed by castor oil, rhubarb, or some very gentle aperient. The object of the mild mercurials is to increase the action of the liver, and clear the abdominal canal. It is not necessary to give them in large doses; the milder the dose the better, given two or three times a day. In this case, too, alkalines and saline medicines are useful, especially where acid eructations are frequently complained of, with an acid taste in the mouth. Hydrocyanic acid is very useful in these cases. This treatment is to be combined with strict attention to the diet: diluents and mucilaginous drinks, with a farinaceous diet, the smallest quantity being taken at a time.

This affection, although slight in itself, sometimes tends to pass into a

chronic disease, which is of a much more serious character. Sub-acute enteritis, as distinguished from the intense form, is not accompanied by obstinate constipation. It seems to be chiefly an affection of the mucous membrane, and occurs in combination with fever: but sometimes it exists independently of any febrile affection. It is very apt to occur in children, and in these cases, where it is a complication of fever, the inflammation seems to affect the glands of the intestines, the isolated as well as the grouped glands; if the disease goes on long, it leads to ulceration of the glands, and ulceration in the intestines is a very serious matter. The sub-acute form of enteritis is generally accompanied by more or less of febrile symptoms, and the system is much disturbed. In some forms of sub-acute enteritis, there is a remission in the phenomena of the fever, it being more intense at some periods of the day than at others. It may also be accompanied by pain and tenderness in the abdomen; thirst; often headache; the tongue variously disordered: it is often raw at the tip, white and furred in the centre, and the papillæ enlarged and florid, having a glazed and copper-looking appearance; the evacuations are very much disordered, and sometimes there is diarrhœa, or a considerable discharge of fæculent matter of a very dark color, or of a greenish tinge; at other times the motions are defective in quantity, the bile varying very considerably. In some cases, where the fever rises very high, there is constipation, though not of an obstinate character; in these cases, the abdomen is apt to become tympanitic. The treatment of this affection, is a more moderate application of the same means employed in the acute form: leeching at the abdomen is generally sufficient, as a topical means, with fomentations or poultices; and what I have found to answer extremely well, after the severity of the inflammation and the pain have subsided, is the application of flannels dipped in hot water, or in some slightly irritating solution, as turpentine, vinegar and water, or water containing ammonia, and then laying over the whole an oiled silk, or a Mackintosh cloth, to keep up a perpetual fomentation. The irritating fomentation may be continued for several hours without intermission. The convenience of these forms of fomentation is very great, and they have remarkable effect in relaxing the fever. The fever in these cases is generally accompanied with a degree of local heat, chiefly perceptible over the region of the abdomen; and, sometimes, if the heat in the abdomen can be subdued, the general febrile symptoms subside. You find this relief indicated by the perspiration breaking out in other parts. A warm bath is used sometimes with the same view, and it answers exceedingly well, particularly in children. Not unfrequently, after a bath, there is apt to be an accession of fever, a sort of re-action, which is relieved by perspiration; but if it is not, the fever is aggravated. The main part of the treatment, in the sub-acute inflammation of the intestines, is to alter the state of the secretions, and for this purpose mild doses of calomel should be given, three times a day, according to the state of the patient; sometimes once a day suffices, it being carried off either by castor oil (in teaspoon-doses for children, or a dessert spoonful for adults), or else sulphate of potash and soda, or rhubarb and senna. The

great indication in this form of disease, is to modify the secretions by increasing them in quantity, and augmenting the action of the liver; mild mercurials will be pretty sure to subdue the inflammatory action.

Chronic gastritis often succeeds to the sub-acute form when it is neglected. The symptoms are very much like those of the sub-acute variety, but more varied as to degree; so much so, that, frequently, I have met with cases of chronic gastritis terminating suddenly in death, by perforation of the stomach in a most unexpected manner, the patient exhibiting previously but little signs of disease. I recollect a case that impressed me strongly with this fact. The patient was employed about his ordinary occupation, and had never complained of any serious affection, until, one day, he was suddenly seized with most violent pain at the epigastrium, and was brought into the Hospital. The moment I saw him I did not hesitate to say that there was in him all the symptoms of perforation of the stomach; the pain was of the most excruciating character. Besides this very severe pain, which caused the patient to assume most unnatural postures, so that, at times, he was almost bent double on himself, in his efforts to procure relief; his countenance betrayed excessive anxiety, the skin was covered with perspiration, and the breathing was extremely quick; he had a feeling of constant sickness and nausea, with inability to vomit. There was inflammation of the peritoneum, particularly in the neighborhood of the stomach, with an effusion of serum. From whatever cause the perforation arose, it is certain it was the immediate cause of death. He had scarcely complained before of anything more than flatulence in the stomach, and so forth. There is, however, in most cases of chronic gastritis, constant tenderness and pain in the epigastrium, and sometimes beneath the left scapula, just as an affection of the liver will cause pain in the right shoulder. All these symptoms are increased after eating and drinking, particularly indigestible matters. Vomiting is not a constant sign; sometimes blood is vomited in an altered or decomposed state. There are various sensations connected with chronic gastritis: a gnawing and sinking, referred to the epigastrium; a bad taste in the mouth; sometimes a peculiar saltish taste, an acid taste, or a bitter taste, and thirst; these are pretty well constant symptoms. The appetite varies very much, and sometimes food may be taken to a considerable extent, without producing any inconvenience. It is amazing what quantities of food may be taken in some diseases without inconvenience: the fact is one that cannot be explained. The tongue is red in chronic gastritis; sometimes, the epithelium appears as if scraped all off, and the tongue left quite raw; sometimes, there are patches of the epithelium left on here and there, and the tongue is continually peeling and casting off its skin. There is little doubt, under these circumstances, that there has been a degree of inflammation affecting the tongue itself; perhaps, induced by the acid eructations and vomiting. Sometimes, the tongue presents protuberances of a remarkable character, and, sometimes, it is cleft into fissures, and is very apt to scale and crack. All these are symptoms, generally speaking, of chronic gastritic irritation, or actual inflammation. There is occasionally, besides the pain and uneasiness in

the epigastrium, a pulsation felt in that region, and not unfrequently palpitation of the heart. The urine, in all these cases, is always, more or less, disordered; generally scanty and high-colored, abounding in lithates, and lithic acid deposits. The skin is dry, and, occasionally, there is feverishness present, more particularly an inward kind of fever; heat within the body, and the hands and surface cold. Frequently, there is headache, and restlessness, with irritability of temper. The bowels generally are costive.

Chronic Duodenitis is sometimes connected with the affection I have just been describing. Its chief distinguishing features are pain and tenderness below the right hypochondrium, with uneasy sensations, chiefly two or three hours after a meal, accompanied by nausea, and eructations of wind; also discomfort and various symptoms of feverishness and thirst, felt for some hours after eating. Sometimes these symptoms are connected with a disturbed state of the secretion from the liver, the action of that organ being interrupted, and jaundice resulting: the stools at the same time being either pale, without bile, or else they will exhibit bile in an altered state, of a dark color.

The morbid appearances of chronic gastritis are: dark patches of redness, with thickening of the stomach, and the color is darker and less vivid than in the acute form of gastritis; but what distinguishes it most is a great change in the structure of the thickened parts, as I have already stated, in speaking of the characters of sub-acute enteritis; there may be also more or less of ulceration in these spots. Sometimes the membrane appears to be studded over with little grains, about the size of hemp-seed, or even as large as small peas, in great numbers. The thickening extends from the mucous to the sub-mucous coats, sometimes to a very great extent. Ulceration is met with, too, with a soft thickening around it; this is the difference between the ulceration occurring as the result of chronic disease, and that which takes place in acute disease, which affects the glands. Sometimes the whole mucous membrane is ulcerated through, and the ulceration perforates the muscular or sub-mucous coat, and is stopped only by the peritoneal coat; and in other cases it may go through the peritoneal covering of the stomach itself, and the contents of this viscus may become extravasated into the abdominal cavity, thus producing fatal peritonitis.

The causes of the sub-acute form of these affections are various: irritating matters or food; habitual irregularity of diet; too stimulating or too irritating food of any kind; very often preserves and condiments, which, if taken in excess, are very apt to excite imperfect action in the liver, and this is the foundation of many diseases of the abdominal viscera. When the bowels act freely, we may take many things with impunity; but if their action be interrupted, we cannot take such food without producing inflammation. Sedentary occupations, and a constrained posture, are especially apt to predispose to attacks of gastritis. Stimulating food tends in an especial manner to impair the function of the liver; and the stomachs of habitual drunkards are almost always in a state of chronic inflammation; sometimes ulceration, and even cicatrices, have been found there.

The treatment of chronic gastritis must be of a mild antiphlogistic form, continued for some time. Leeches may be applied when there is any increase of pain, and tenderness, at the epigastrium; at other times, blisters answer better, or mustard poultices, which are often very useful in these cases, when applied to the pit of the stomach for a short time; they tend to draw off the excessive irritation that takes place during digestion. It is likewise useful to alternate the application of mustard poultices to the pit of the stomach, with hot fomentations. With respect to the internal treatment, mild saline liquids, hydrocyanic acid, and gentle doses of hydrargyrum cum creta, combined with ipecacuanha, are useful; carried off with castor oil, or else mild doses of rhubarb and sulphur, or sulphate of potash, given occasionally, taking care to keep up a moderate action of the bowels. Drastic purgatives increase the gastritic symptoms, and hence should be carefully avoided. The action of the lower intestines is to be promoted by injections. It very rarely happens, according to my experience, that injections act satisfactorily, without we, at the same time, assist the upper part of the canal; we may evacuate the lower part of the bowels, and promote the action very well there, but we do not increase the secretion of the liver, which is a fundamental point with regard to the treatment of abdominal affections. The diet must be most carefully managed; the mildest farinaceous food given, taking particular care to avoid large quantities of anything; and in severe cases it is better to take everything in the form of thick liquids. When the gastritis has been chiefly overcome, the patient may then have a little solid food, but it must be of the lightest kind, such as fish or fowl, or the gelatinous parts of meat. After considerable improvement has taken place, nitrate of silver, or nitrate of bismuth, in small doses, may be given to remove the remains of the inflammation. Where the secretions are disordered, they must be especially attended to; and as the symptoms of irritation and tenderness at the epigastrium pass off, the bitter infusions may be substituted. These may be combined with mild mercurials and aperients, where necessary: taraxacum or dandelion, in small doses, is useful.—*London Med. Times.*

THE LEPROSY IN NEW BRUNSWICK.

[In No. 24 of the last volume of this Journal, a report by Mr. Skene, which was published in the London Medical Gazette, respecting this disease, was alluded to, and some extracts made from it. Dr. Boyle, of St. John, New Brunswick, has published in the same work some remarks on that report, in which he endeavors to show that all fears respecting the disease being contagious are unfounded, and that the recommendation, therefore, which was made there, of the erection of a lazaretto in which the lepers may be strictly secluded, is unwarranted. As this is an important view of the matter—quite as much so to us in the United States as to the inhabitants of London—we copy from the Gazette some of Dr. B.'s remarks.]