Etiology and treatment of muco-membranous colitis / by Dr. Bottentuit.

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ETIOLOGY AND TREATMENT

OF

(5)

MUCO-MEMBRANOUS COLITIS

BY

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ETIOLOGY AND TREATMENT OF MUCO-MEMBRANOUS COLITIS.

Symptoms.

The symptoms of muco-membranous colitis differ according to the form it takes and its intensity and cases may be divided into three classes: 1. Those who are habitually constipated; 2. those who suffer alternately from constipation or diarrhoea; 3. those who suffer from persistent diarrhoea.

The first two classes are more frequent than the third; those who suffer from alternate constipation and diarrhoea are rather less than those who are habitually constipated. Of the cases I myself have attended at Plombières 50 per cent. were habitually constipated, 40 per cent. suffered alternately from constipation and diarrhoea, and 10 per cent. suffered habitually from diarrhoea.

The first symptom which attracts the attention of the patient is the presence of slimy matter and false membranes, which are generally evacuated with the stools. In some cases these secretions are sufficient in quantity to provoke of themselves an evacuation, and in these cases it is found that they are the sole constituents of the excreted mass.

The form, the consistence, the colour and the quantity of these masses are very variable; sometimes they present a membranous form, and are composed of long filaments, cylinders, tubes, with often a ribbon-like appearance. This last form explains why they have so often been mistaken for taenia. Perhaps the most frequent is the glairy form. In this the dejecta may appear as amorphous matters, sometimes mixed with faecal matters, at other times they form a voluminous mass large enough to fill a tumbler, in other cases they resemble sputa.

When the false membranes are evacuated as they have been formed in the intestine, they may have the form of cylinders and bear on their surfaces the marks of the folds and the villi of the intestine. These marks often lead the patients to think that a fragment of the intestine has been evacuated. When they are divided into segments they are like ribbons, I have seen them as long as a metre, and the patient often compares them to macaroni or to rather large vermicelli. Sometimes when the divisions are clearly

marked they resemble oxyuris vermicularis or a grain of rice. Sometimes they take the form of small flat discs which are compared to confetti; all these different forms may be found in the same subject. The colour of the secretion is variable, it depends on the length of sojourn in the intestine or it may undergo a change by mixture with the intestinal secretions or with the products of digestion. They sometimes exhibit streaks of blood, but this is rare, except when the patients suffer from haemorrhoids. In some cases the expulsion of these matters accompanies every action of the bowels, sometimes they are quite separated from the faecal matter.

But whatever the form or whatever the amount expelled, the composition of the mass is always identical. It is formed of amorphous matters, semi-transparent, containing in its centre some epithelial cylindrical cells, leucocytes, salts, fatty granules, and invariably large colonies of bacteria. Amongst the numerous bacilli which have been found the most frequent are the coli bacilli.

The alternation of constipation and diarrhoea or *débacle*, is rather less frequent than constipation (40 per cent). It is characterized by periods of constipation lasting several days, followed by a motion composed of hard matter with a fetid odour. After that some liquid motions, later on motions completely liquid, and then constipation recommences. The diarrhoeic form is much less frequent than the others. I called attention to this in 1892, I had observed it in only 10 per cent. of cases under my care. The patients did not suffer from constipation, and had never previously suffered from it. Often the diarrhoea had existed long before the muco-membranous colitis had shown itself.

One of the most important symptoms present in almost all cases of muco-membranous colitis is pain. Generally patients suffer from an uncomfortable feeling over the whole of the great intestine, which is usually more severe on the right side, over the hepatic flexure, and on the left side over the splenic flexure. Next in frequence to these are painful points in the iliac fossa on the right or left side near the caecum or the sigmoid flexure. There is another point, making the fifth, between the umbilicus and the ensiform appendix. The pain in all those points is often spontaneous, but can always be provoked by pressure.

If the pains are violent an error may be committed, and they may be taken for hepatic or gastric colic, or for pain situated in the appendix, whilst in reality it is the tranverse colon which is the seat of the pain. In many cases there is cutaneous hyperaesthesia in the regions of the sigmoid flexure, sometimes on the right, sometimes on the left side.

Patients often complain also of various disagreeable feelings, such as weight, tension, writhing, or throbbing, and often suffer from very painful attacks, which may last several days or several weeks. Errors of diet, or a strong purgative or fatigue, or any kind of excess, or even moral causes, may produce it. A period of constipation generally precedes these attacks. There is a great increase of the digestive troubles—anorexia, gastric pains, flatulence of gastric or intestinal origin, meteorism, vomiting, prolonged constipation, and also of nervous troubles. The pain is generally around the umbilicus and in the region of the sigmoid flexure. There is also tenesmus, but this last symptom is more frequent when the irritation is near the rectum.

Nearly all these patients are of a neuro-arthritic type. They are of a nervous disposition, and have suffered from rheumatic or hepatic troubles, and there is an excess of uric acid in their urine. They are subject to headaches, weak circulation, and haemorrhoids.

Digestive troubles have been the first symptoms, such as flatulent gastric dyspepsia, with a coated tongue, a capricious and irregular appetite, dilatation of the gastric and intestinal regions, eructations, and a tendency to sleep after meals. In almost all cases I have found hyperchlorhydria. The stomach is generally dilated, and there is displacement of the right kidney. There is also a flaccid abdomen, atonic and wallet shaped. The muscles of the abdominal walls are loose, there is lowering of the intestines, and later on of the stomach. The liver is generally swollen, sensitive, and even painful. Some authors have found the liver diminished in size as often as in half the cases. I have not myself found this to be so. I have found it in only a small number, but in more than half the cases I have seen I have found a decoloration of the faecal matter, as in fact have almost all those who have studied this disease. Often in these cases there is difficulty of respiration, ranging from shortness of breath to dyspnoea, with palpitation, arrhythmia, and even attacks of cardiac pain, which resemble angina pectoris.

In a remarkable discussion which took place at the Académie de Médecine (1896), Dr. Reclus brought forward observations on 20 cases of muco-membranous colitis which had preceded appendicitis. This however was exceptional. Neither Potain, Charrin, or Comby have mentioned in their works on this subject any cases in which appendicitis was a consequence of the muco-membranous colitis. In my own experience at Plombières of 1,000 cases I have not found one of appendicitis. Taking into consideration these statistics, Dieulafoy stated that real appendicitis, as proved by an operation, was a very rare and exceptional fact.

But alongside of these acute and infectious cases of appendicitis, there are others of subacute form which Dieulafoy calls entero-typhlo-colitis. I have seen many cases of this kind of typhilitis or cartarrhal appendicitis at Plombières. On such cases the effect of the waters has been most satisfactory. They are sometimes accompanied by muco-membranous colitis, but rarely. In fact, patients suffering from muco-membranous colitis are not more exposed to the dangers of appendicitis than other persons.

Intestinal lithiasis often coincides with muco membranous colitis. I have seen many such cases. Attention has been called to this fact within the last twelve years by E. C. Jones, Edward Shattock, R. S. Thompson, Delépine, Dieulafoy, Matthieu, etc.; while Sir Dyce Duckworth and Dr. Archibald Garrod have written an interesting paper on this subject (*Medico-Chirurgical Transactions*, 1902). One often finds in the faeces small grains of sand of a yellowish colour, which are evacuated either with the mucus or without it.

The passage of this sand from the bowels is not always felt, but sometimes it is, and accompanied by colic, pains, nausea, and vomiting. It is important that these crises of pain should not be mistaken for hepatic colic or for those of appendicitis. Dieulafoy considers that this intestinal lithiasis is of the same kind as the others, and is depen-

dent on a gouty or arthritic diathesis. These salts are composed of phosphates and carbonate of lime, and also of ammonio-magnesian phosphates. They also contain some organic matter.

Etiology.

Muco-membranous colitis occurs at all ages. The number of children affected is about 7 to 8 per cent. Some authors consider that constipation is the constant cause of this illness. I gave in 1892 some statistics on this point, to-day they would come to nearly 6,000, only half of these suffered from real constipation with intestinal atony. The others suffered from alternate constipation and diarrhoea ; one-tenth suffered from diarrhoea. I attended 2,000 persons suffering from constipation, but showing no signs of muco-membranous colitis.

Doubtless constipation plays an important part in the affection. The presence of hardened matters irritates the mucous membrane of the intestine, but we must not forget that a faulty digestion is an important agent of infection and auto-intoxication. All persons of an arthritic diathesis are subject to catarrhal irritation of the mucous membrane, of the bronchial tubes, larynx, and uterus. Constipation may only be an exciting cause. Sometimes, however, muco-membranous colitis is a sequel of enteritis and dysentery.

Some authors consider that neurasthenia is the first phenomenon. My own statistics and those of Langenhagen are in opposition with this theory, but it is certain that the neurosis of arthritic patients is greatly increased by the presence of muco-membranous colitis.

Half the cases of muco-membranous colitis were men or children and the other half women. Three-quarters of them had no affection of the womb or its annexa.

Diagnosis.

The presence of slimy matter and false membranes in the faeces enable us at once to recognize muco-membranous colitis. When the pain is situated over the colon or McBurney's point one must take care not to attribute it to appendicitis, or when over the hepatic flexure, to the presence of hepatic or renal calculi, or when over the splenic region, to tumours of that part.

Diagnosis is difficult only when there are paroxysmal crises. In such cases the intensity of the pain, the feverish conditions, and the vomiting may make one mistake them for appendicitis, hepatic or renal colic, or ovarian pain.

Prognosis.

It is rarely a fatal disease, but it is an affection of long duration, difficult to cure and causing numerous complications; amongst others it induces cachexia accompanied by a neurasthenic condition of great gravity.

In children there is loss of flesh and appetite, low spirits, and a general want of development. In the case of girls, the appearance of the menses is delayed.

Treatment.

We must take into account the previous treatment. Almost all the patients I have attended had used purgatives much too freely. In the first stage of the illness

purgatives appear generally to be of some service ; but in the course of time their good effects diminish and their prolonged use irritates the mucous membrane, and thus augments the constipation and the secretion of mucoid matter. This is especially true of drastic purgatives and saline purgative waters. All the patients I have attended have previously been subjected to milk diet, but without good results.

The diet ought to be the same as is given in gastro-intestinal dyspepsia or in dilatation of the stomach. In the first place, it is most important that all food which leaves residues after eating, such as tendons, fibrous tissues, grains, and those which the juice of the stomach and intestine are incapable of dissolving and digesting, should be avoided. Their passage keeps up the inflammation of the intestinal mucous membrane and their presence provokes sometimes peristalti ccontractions which are often painful, but which produce an action of the bowels. From this action arises the reputation of salads, green vegetables, and fruits as having a laxative action, but often they do not act in this manner and on the contrary the constipation increases. It is easy to demonstrate in what state the residue of such food after having passed through the intestine, is evacuated. If the faeces are placed on a fine sieve and water is poured on them sufficient in quantity to break them up and one continues to pour it till the water which is passed on the faecal matter has ceased to be coloured and has lost its odour, we then find on the sieve the residue of the food, that is to say fibres of salads, of French beans and tendinous fibres of meat and the skin of farinaceous vegetables.

It is especially necessary to advise such patients to eat slowly, to masticate their food carefully in order that it may be thoroughly broken up and well mixed with the saliva. Food should be taken in small quantities but of a very nutritious kind, such as eggs prepared in any way except hard boiled. Light meats, whether roasted, grilled, or baked with their gravy, may be taken, but without any sauce. If the patient has not good teeth he ought to have the meat hashed or even passed through a masticatory. All high meats or these badly cooked, and especially all kinds of food which are in a state of decomposition (such as certain cheeses), which are in consequence full of toxins and microbes, must never be eaten.

We may allow white fish, boiled or fried, but if fried the skin should not be eaten. Farinaceous vegetables (potatoes, peas, French beans, lentils, chestnuts), if passed through a sieve, may also be allowed. I recommend my patients to eat the vegetables with their meat, and to be careful not to swallow their food too quickly. If kept some time in the mouth, the effect of the saliva on them will be to help their digestion. Maccaroni and rice are also permitted. Toast in small quantities may also be given, but I prefer breakfast biscuits. Also milk soups, thickened with pastes, also such fruits as have no pips, peaches, apricots if quite ripe, especially when cooked, may be allowed ; but, on the other hand, fatty foods, sour fruits, underdone food, sauces, ragouts, game, shellfish, pork (excepting the lean part of ham), must be forbidden ; also wine, beer, and all alcoholic drinks are not allowed.

A small amount of water or tea taken at meals is useful and we are in the habit of prescribing at Plombières before each of the two principal meals a glass of the water of the

Source des Dames (125° F.). For patients whose dejections are wanting in colour, and who have a sluggish liver, I add to the glass of water 1 gram (15 gr.) of Carlsbad Sprudel salts. The two glasses of water contain, therefore, 2 grams (30 gr.) of Sprudel salts every day. In eight or ten days the faeces have a natural colour, and the fetid odour has disappeared. It is necessary in these cases to insure a regular action of the bowels either by laxatives or enemata. One of the best laxatives is castor oil but when it is not tolerated, we must have recourse to magnesia, sulphur, cream of tartar, either separate or mixed in equal quantities. Sometimes when purgatives which are generally successful fail some other medicine will succeed; sometimes one must have recourse to cholagogues, and often to calomel, especially in cases of sluggish liver. Often glycerine suppositories are very useful or, when there is a spasmodic condition of the rectum, suppositories of belladonna. Sometimes when the constipation is very marked we have to use all these remedies combined.

When there is diarrhoea bismuth salicylate should be used, and the intestines should be washed out and mild antiseptics given; when there are paroxysmal crises hot compresses on the abdomen, poultices and frictions with belladonna should be prescribed.

Baths also are a source of great relief. The baths of Plombières water of 40 minutes to an hour duration at 35° to 37° C. have a great and sedative effect both on the nervous and circulatory system. They are of great use in cases where there is spasm of the colon or crises of enteralgia. Their first effect is to produce sleep, often they cause a disappearance of the mucoid matter, regulate the action of the bowels and diminish the attacks of diarrhoea.

Together with the laxatives washing out of the intestine ought to be resorted to. These washings not only help the discharge of the faecal matters and the muco-membranous secretions, but they also soothe the pain due to intestinal irritation and spasm. They are not given only as a mechanical means of evacuating the intestine, but as a therapeutical agent, which, thanks to the specific power of the Plombières water, acts on the intestinal mucous membrane. These douches must, however, be given with great care. The pressure must not be too strong, or it will provoke painful crises or exaggerate the spasms. The vessel which holds the water should be placed at 40 or 50 cm. above the patient's bed. The temperature of the water should be from 38° C. to 45° C. The amount introduced into the intestine ought not to be very large, the injection of 1½ to 2 litres into the intestine at the same time will often provoke pain and spasm. I generally prescribe only ½ litre for each injection. It should be retained for some minutes, but no great effort ought to be made to retain it. The patient should lie first on the left side, then on the back, then on the right side, so as to enable the water to circulate through the whole of the colon and caecum. When this water has been rejected, and after resting for a few minutes the same amount of water should be reinjected, I always advise my patients to take this washing out after they have had an action of the bowels, because it is not to be looked upon as a mechanical means of evacuating the intestine, but as an intestinal bath.

In each bathroom at Plombières there is a sofa on which the patient lies, and at the foot of the sofa is the recipient for the water fixed at a height indicated by the doctor. There is also a thermometer with a dial which gives the temperature of the water in the recipient. Attached to this vessel containing the water is a tube which descends as the water in the vessels lowers; there is also attached to the tube a little instrument which descends with the water. This has the advantage of enabling the patient to know exactly how much water has been injected into the bowel. The number of these bathrooms at Plombières in 1897 was 15, now there are 100. During the last six years the number of baths has increased from 3,000 to 28,000.

In the treatment of muco-membranous colitis we must not forget to consider the special indications to which the different complications give rise. The more frequent are gastric affections, hyperchlorhydria, floating kidney, uterine or utero-ovarian affections, and neurasthenia.