

AN
INAUGURAL DISSERTATION
ON

Polo-rectitis

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Colo-rectitis

Division of the Disease.

Colo-rectitis consists of inflammation of the mucous membrane of the colon and rectum.

When the inflammation has extended to all the coats of the bowels ulceration is very apt to follow, producing an extensive and ungovernable disorganization of the intestines, which gives rise to a class of symptoms that seems to differ from the early stage by being less acute, but having some resemblance to them. It therefore appears that there should be a division of the disease into acute and chronic dysentery, the acute form is inflammation, whilst the chronic is the effect of it, following the acute attack, which has been unskillfully treated or the art of medicine has

proved to frail to subdue

The following definition of Col-
rectitis we deem sufficiently accurate
very frequent mucous or muco-sa-
nguinolent evacuations, straining
at stool, tormina, and Tenismus, usu-
ally attended with pyrexia

Acute Col-rectitis.

Admitting that various degrees of
severity exists in this disease, from
very slight cases, which seems to affect
the health but little and passes off
in a few days without any bad con-
sequences, up to one of the most severe
forms of disease to which our race is
susceptible. This severe form of the
disease usually occurs epidemically,
and ^{has} committed great ravages in fleets
and armies. We will describe as mild

a form as the disease ever assumes and then
treat of its more intense form. This
simple form of the disease is usually
marked in by liquid and feculent
evacuations or they may assume at
once a mucous or mucosanguinolent
character. There is very little if any
prominent pain in the abdomen,
previous to the patient going to stool
there is considerable griping with pecu-
liar sensation and motion of the bowels
usually referred to the sigmoid flexure
of the colon. There is heat about the anus,
inducing considerable straining at
stool, the evacuations scarcely ever
exceed six or seven through the day, but
may increase considerably in twenty four
hours, feces are occasionally observed mixed
with the mucous or mucosanguinolent
discharges, the tongue is slightly furred, the

though it frequently assumes a natural appearance, the appetite usually remains unimpaired and the organs that are affected in the severer forms of the disease, are scarcely ever disordered. The disease usually runs its course in seven or eight days and is scarcely ever fatal, but frequently leaves the intestines in a tender condition and more susceptible to after attacks of the disease, & sometimes lays the foundation of a chronic form of the disease. Inflammation so slight as this would perhaps only occupy the rectum and a small portion of the colon.

A more severe form of the disease than that which has been described above, is usually observed to prevail in our epidemics. This disease is generally preceded by diarrhoea, though the discharges may assume at the beginning

a mucous or muco-sanguinolent nature characteristic of dysentery. Sometimes the disease is ushered in with a chill, soon followed by febrile heat, at other times the local phenomenon begins simultaneous with the appearance of the general symptoms. In many attacks there is no premonitory symptom except a pain in the abdomen soon followed by mucous or bloody evacuations. A disorder of the stomach and bowels, characterised by constipation, anorexia, flatulence, nausea and sometimes vomiting may be the premonitory symptoms. Uncomplicated dysentery when fully formed commences with griping pains in the abdomen, followed by its characteristic discharge of mucous or mucous mixed with blood, which

Considerably relieves the distressing hor-
mura by removing the irritating
matter. These discharges are passed very
frequently, almost incessantly with con-
siderable pain, which at this stage of
the disease, is referred to the rectum, pro-
ducing an irksome, feeling of heat
and weight about the anus, extending
thence up the rectum, which induces
an intense and vain desire to go to
stool, which may be denominated *Tenismus*.

It usually increases in severity and
frequency, producing much straining
and consequently a relaxation of the
sphincter ani muscle is inauca,
which gives rise to prolapsion, espec-
ially in children. The discharges
are seldom less than a dozen per
day, often exceeds that number,
and it is said in very bad cases the

The evacuations have been successful
to amount to one hundred per cent.
After the disease has continued
for several days there is not unfreq-
uently voided along with the mucous
substances resembling suit, tallow
and shreds of false membrane, also
sybils is sometimes passed along with
the characteristic discharge. At the
advanced stages of the disease the
discharges ^{have} a distressing odor said
to be peculiar to dysentery. As there
is great sympathy existing between
the bladder and rectum, it partic-
ipates considerable in the irritation
and dysuria occurs along with the ten-
sions. There is always fever attending
the severer form of the disease. The
pulse is usually frequent, full and
forcible, the skin is warm and dry,

The tongue is covered with a white
mucous coat, sometimes moist at
others dry and dark, and the secretion
from the liver and kidneys is
diminished. The disease runs its
course in from eight to twelve days,
and the patient recovers. Occasionally
owing to the severity of the inflam-
mation, the depression of the system is so
great that reaction is very difficult,
this depression is the consequence of the
violence of the shock made on the ner-
vous system. When the symptoms
of depression are great the patient
has an anxious look with sunken
features, the pulse is frequent and small,
whilst the local phenomena is
extremely violent. The abdomen
is very tumid and tense with great ten-
derness on palpation and the discharges

are very frequent, attended with much
Tormina and Tenesmus. Such cases
are often seen in our epidemics.
Should the Therapeutical measures
prove of no avail the patient be-
comes weak and very restless, the tormi-
na and Tenesmus increase, the abd-
omen is much swollen, the tongue
is either furred, very and brown or
becomes glazed, red and sometimes
gashed, discharges become more fre-
quent and copious, they now assume
a different appearance, instead of
consisting of mucous and blood
alone they are mixed with a purulent
substance and the morbid secretion
from the upper bowels, which has
the appearance of bloody serum;
whilst the mind is low and
desponding Pr this malignant

former of the disease the patient
may survive and the disease merge
or pass into the Choleric form.

Diagnosis

Colo-rectitis may be confounded with
cholera, hemorrhoidal flux and
diarrhea. The rapidity with which
cholera runs its course and the long
continuance of dysentery is an im-
portant distinction. Tenesmus is scar-
cely ever found in cholera, but in dy-
sentry it becomes one of the most str-
iking symptoms. The discharges in
cholera are very copious and passed with
violence in dysentery they are small;
vomiting is considerable in cholera,
in dysentery scarcely ever. The distinction
between this disease and hemorrhoidal
flux is easy. In hemorrhoids blood flows

from the beginning of the affection without mucus; the appearance of anal tumors, the feculent discharges are solid, an absence of abdominal pain and tenesmus is sufficient distinction. The diagnosis between Colorectitis and diarrhoea is easy in the advanced form of colitis, but at the beginning it is a little difficult, as there is great similarity in all intestinal diseases attended with increased alvine discharges. If a distinction can be drawn we should look for it in the prevailing epidemic, as the pathological condition seems to be the same in dysentery as in the advanced stages of diarrhoea.

Prognosis

A favorable termination of colitis is indicated by the discharges assuming a feculent character, more copious and less

frequent; the Tenesmus becomes less urgent, a mitigation of the pains in the abdomen, an abatement of the febrile symptoms and return of appetite, with a restoration of health in a short time. But when the disease is about to prove fatal, the abdomen is tympanitic, the tormina and Tenesmus disappears suddenly, a livid appearance under the eyes, about the lips and at the roots of the nails; with a cold and clammy skin, cold extremities, involuntary discharges, a very feeble and frequent pulse, low muttering delirium, subsultus tenaximus, and sometimes hicough, such symptoms prognosticate a speedy and fatal termination. Should the disease continue, without any abatement of the symptoms beyond a fortnight the prognosis would be unfavorable. If the patient evinces much pain or pressure along the course of the colon, giving evidence that the inflammation

has involved the peritoneal coat of the bowels which portends a fatal result. Sporadic cases usually terminate favorable but it is in our epidemics of the disease that prove so malignant.

Complications of Colorectitis

This disease may be associated with fevers, that is, instead of the fever symptomatic of dysentery there supervenes an idiopathic fever. As there is a great tendency in fevers to ^{affect the} alimentary canal, it is not surprising that this disease should be complicated with such affections.

The complication of this disease with typhus or typhoid affections seems to be owing to an exposure to some debilitating cause, such as unwholesome and insufficient food, to wet and cold nights, as in marching armies and where a number of persons are confined in places comparatively

small with inattention to proper ventilation and cleaning, such as in ships and besieged towns. In these situations and from such causes the disease has proved very malignant. When this complication exists there is great prostration of strength from the beginning, nausea and sometimes vomiting. The pulse is small and frequent. The tongue is foul, dry, and dark, with sores on the teeth. The skin is sometimes hot, at others cold, and from the fourth to the sixth day a milky or petechial eruption appears upon the neck and breast. The dejections are very frequent, more copious than in the uncomplicated form and composed of mucus mixed with a dark colored blood. The nervous system also participates in the disorder producing delirium stupor and other characteristic nervous symptoms. All these symptoms are not perceptible in every case.

Colorectitis may be complicated with some form of malarial fever. Should this disease occur having been preceded by a chill and fever for several days there would be reasons for suspecting the complication. The disease is paroxysmal in its character having regular paroxysms every day or every other day with periods of relaxation or intermission. During the paroxysm the symptoms are more intense than in the uncomplicated disease. In a theoretical point of view it is of great importance that a correct diagnosis should be made. In warm climates where diseases of the liver prevail most there is considerable complication of those diseases and colitis. The disease begins with diarrhoea, the evacuations are variously colored, being of a deep

yellowish, green or black collar and
preceded by great tormina. There is yell-
lowness of the skin, conjunctiva, urine,
and a yellow fur on the tongue. Through-
out the disease there is great oppression
about the epigastrium, nausea
anorexia, frequent pulse and intense
thirst. This complication of disease
proves very malignant in tropical regions.

Chronic Proctitis

When the fever which attends the
acute attack has subsided and
the patient gains some strength he
occasionally experiences sharp
pains in the bowels with frequent
evacuations of mucus occasionally
mixed with a purulent matter
or blood. The abdomen is ^{full} and hard,
without much pain on pressure. The
pulse is full and slow, the tongue

is furred, but sometimes it is of a bright and glossy character, and the skin is dry and rough. If the rectum and lower portion of the colon be the seat of the disease, the discharge, usually enveloped in the morbid secretion of the parts, should the remedies employed be unbeneficial, the patient gradually emaciates, the skin becomes of a fair yellow color, the vital powers give way very fast, the feet and legs become edematous, after a short time hectic and acites follow and the patient sinks from irritation and exhaustion. When this disease is complicated with tuberculous diseases the malignancy is much augmented.

② Anatomical Characters

These are found to differ according to the period at which the patient dies, should this event happens in the early

Stage The mucous membrane of the rectum
and colon always evince signs of infla-
mmation, while the external appear-
ances are healthy. The mucous membrane
presents a bright red or brownish color
Sometimes there is sensible elevations of
the solitary glands, with intervening heal-
thy structure, at other times the whole
membrane is affected equally. Sometimes
it is covered with a purulent or sangui-
neous secretion, giving evidence of
extensive ulceration, on removal
it presents an unbroken texture
When the disease has proved fatal in a mo-
re chronic form, there is much thick-
ening of the coats of the bowels, they seem
contracted in diameter and ulcerated. They
are situated in the mucous follicles and solit-
ary glands. Perforation has been observed
Other viscera has been found involved as the

mucous membrane of the small intestines and the stomach. sometimes the mesenteric glands are enlarged and inflamed and the omentum dry and shrivelled. Abscesses are not unfrequently in the liver.

In cases of death from chronic colitis the mucous membrane presents an ulcerated appearance and the ordinary signs of chronic inflammation. Some of the ulcers are found in a state of cicatrization and others entirely cicatrized, proving that after the bowels have been extensively ulcerated patients may recover.

Causes

Colo-rectitis is more prevalent in summer and autumn than in winter owing perhaps to the alternation of heat and cold, whilst the days are warm the nights are cool and the earth is bespread with heavy dews. This discrepancy is more manifest in warm

than in temperate climates and consequently the disease is more prevalent in the former locality. Therefore the combined influence of heat, cold and moisture are exciting causes of the disease. Where persons are much exposed to these influences, as in armies the disease is very prevalent. Substances directly irritating to the alimentary canal are exciting causes. Malaria is certainly a cause of this disease and there is reason for supposing it to be as it is known to prevail in malarial districts, whilst the substance of it are constantly influenced by a malarial diathesis. This disease was formerly believed to be contagious, but at the present day it is universally believed to be non-contagious. Where a number of patients are confined together the disease seems to be communicated but this is perhaps owing to the inhalation of the putrid effluvia now admitted to be a cause of the disease.

Treatment of Acute Colicities

The treatment of this disease must vary according to whether it is simple or complicated. When the disease is uncomplicated it should be of an antiphlogistic character. To fulfill this indication depletion presents itself as a great subduer of inflammation. When the patient has a frequent and quick pulse, pain in the abdomen and indications of high inflammatory excitement which induces general fever, general bleeding should be resorted to, unless peculiarity forbid it. Bleeding would be useless in the advanced stage of the disease. Purgatives are usually given in this disease, they are sufficiently ^{indicated} when the disease has commenced abruptly, while there is considerable feculent matter in the bowels and another to deplete the portal veins and diminish congestion. But should the

disease begins with diarrhoea, which is a more frequent premonitory symptom, they should not be given very early, as the diarrhoea has sufficiently cleansed the bowels, and to give purgatives under these circumstances would be to augment the irritation of the inflamed membrane. Should a considerable time have elapsed without a feculent discharge a mild cathartic may be given as the morbid secretions would be a source of irritation. Drastic purgatives should not be given on account of the irritation they produce. Therefore mild laxatives should be employed, castor oil is the most efficient. Some prefer the neutral salts but they are so irritating for so delicate a membrane. Goddard's conjunction in the portal veins calomel in five to ten grain doses best fulfills this indication, whilst it acts mildly on the mucous membrane.

and excites a flow of bile from the liver
It should be followed in five or six
hours by a dose of castor oil. The blue
pill or hydrargyrum cum creta may be
used in lieu of the calomel. The secretion
from the liver should be maintained
by giving calomel in small doses combi-
ned with opium and speacuanha given at
night until rest is procured. After five
or six days should the symptoms not abate
the mercurial impression may be appro-
ximated. Diaphoretic medicines are useful
in this disease. Should the patient have
hot and dry skin, with nausea and vomit-
ing, the effervesing draught is perhaps
the best. Speacuanha combined with opium
has been employed with advantage. Benefit
may be derived from the warm bath with
care not to expose the surface to cold after bathing.
Opium is much employed in this

disease and its value is inestimable. It not only relieves the distressing pain from which the patient is suffering, thereby producing sleep which is very much interrupted, but it relieves the irritating effect of the morbid secretions from the bowels, with considerable relief of their spasmodic contraction which facilitates the action of cathartics. It may be given with calomel or ipecacuanha which has a tendency to lessen its stimulating effect and direct its action to the skin. Some express a belief that a cure of dysentery, even in an epidemic form may often be effected by the use of opium alone, beginning with its use early and administering it boldly. Various alterative remedies are found beneficial. Ipecacuanha in very large doses has been found beneficial by some practitioners

Acetate of lead in doses from one to three grains in combination with opium has been recommended especially in hemorrhagic cases. Copalva and turpentine given in small doses with emulsion of gum arabic is useful in all stages of the disease and more especially in those that are advanced and attended with ulceration. Turpentine is believed by some to be very essential in the treatment of this disease. Local Remedies

General ^{bleeding} should not be the only mode of depletion, but should be followed by local bleeding with leeches or cups along the course of the colon when there is much pain or tenderness. In cases which are not very urgent local bleeding may be sufficient.

Leeches around the anus afford great relief when there is much tenesmus. Anodyne enema is very beneficial especially in the relief of tenesmus.

For the relief of Tenesmus it should be small, as this disease is much aggravated by distending the intestines.

Perhaps the best enemata is made from magn arrabac, starch or slippery elm medicated with an anodyne. Injections of acetate of lead and sulphate of zinc has been used, and a preference is given to the former in the acute, whilst the latter is preferred in the advanced form.

Summary of the Course of Treatment
When the case is very mild and unattended with fever a dose of castor oil with fifteen or twenty drops of laudanum is all that is required. But if ^{there is} fever at the beginning, blood may be taken from the arm, after which a dose of calomel may be given or should there not be much fever the calomel may be given prior to the bleeding.

After these measures have been employed the patient may be permitted to remain quiet for a short time, during which he may be allowed refrigerant drinks and some anaphoretic medicine. Leeches may be applied to the abdomen if the patient complains of much pain and tenderness. The combination of calomel, opium and ipecacuanha may be given at night followed in the morning by a laxative and repeated every night.

During this time Leeches may be reapplied if there is much pain in the abdomen, warm fomentations to the abdomen, and an anodyne enema for the relief of tenesmus. If the symptoms do not yield to this treatment Purgation may be approximated or the use of some alterative especially the oil of Turpentine.

When this disease is complicated with disease of the liver, the treatment is the same except a more energetic employment of calomel. In the complication with typhoid or typhus fever we find a debilitated condition of the system, ^{and} therefore we should attempt to husband the strength of the patient by giving cordials and nourishing diet. The patient should change his linen frequently and the room should be kept clean and well ventilated. Most of the remedies employed in the simple form are admissible except bleeding and the use of calomel. In this form we would especially recommend the use of oil of turpentine from the beginning in small doses every two or three hours. When this disease is complicated with malarial fever,

The same course of treatment should be followed as in the uncomplicated form except the use of sulphate of quinine, which should be given.

Treatment of Chronic Colo-rectitis

In those cases that affect the small intestine, purgatives are scarcely ever necessary, but without this complication mild laxatives should be given if there is not a mucus from the bowels of a feculent character once a day. When there is much pain and tenderness in the abdomen a combination of calomel, ipecacuanha and opium may be given at night. Great efficacy is placed in the alterative use of the blue pill given once a day in doses of three or four grains. Numerous alterative remedies have been employed, such as sulphate of zinc, sulphate of copper, copalva and turpentine

Small doses of these medicines may be given three or four times a day. Purse-
nitive is a very valuable remedy of
this clap and should be used in every
case as it seems to have a specific act-
ion when there is ulceration of the bo-
wels. If the disease is confined to the
rectum and a lower portion of the colon,
injections of sulphate of zinc is very us-
eful. Should the patient receive no ben-
efit from these remedies a change of
climate may be recommended. Much
depends upon the regulation of the diet
in the treatment of this disease. The patient
should not use animal food but blame
farinaceous food and such as would
admit of easy digestion.