

AN
INAUGURAL DISSERTATION

ON

Acute Peritonitis

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Acute Peritonitis

According to the custom of this Institution all candidates for graduation are required to write a thesis upon some Medical subject, In compliance therewith I have selected Acute Peritonitis and in so doing I do not expect to be able to present any new claims worthy of particular regard, but will endeavor to offer you a condensed compendium of the most approved opinions of the profession upon the subject under consideration. There are various forms and modifications of this disease, to enter into a detailed history of each would be not only tedious but unnecessary, I shall therefore confine myself to the ordinary form and shall not more than barely notice the special and not infrequently accidental varieties of this affection. All the varieties of this

disease are not only painful but exceedingly dangerous, but more especially that form which is usually denominated Purulent Peritonitis, the very name of which fills the mother with horror and dismay. This form as its name implies is confined to women in child-bed. But the ordinary forms of this disease may attack all classes of persons, male and female, old and young, the robust as well as the feeble. But as a general rule it selects its victims from those already of feeble health or becomes a complication of some other disease especially any chronic affection of the bowels. With the above brief history of this disease I shall now proceed to detail its symptoms &c.

Symptoms Course. Peritonitis is sometimes ushered in by a chill or rigor, but

more frequently it begins with pain
and not infrequently both these phenomena
occur simultaneously. The pain commences
most commonly in the lower por-
-tion of abdomen Hypogastric or one
or both of the Iliac regions and rapidly
extends itself over the whole abdomen
The pain is sharp and lancinating
sometimes the pain concentrates itself
as it were, in one spot and then in
various points of the abdomen and is
not infrequently attended by a sense
of heat or burning, which is often quite
distressing to the patient. The abdomen
is universally tender to the touch
when the slightest pressure is made
upon the bowels the patient complains
of exquisite suffering. Also whatever causes
any contraction of the muscles

of the abdomen produces the same effect
Vomiting, the act of defecation, a deep inspir-
-ation or any motion of the body produces
pain. The patient lies with his legs draw-
-n up to protect the abdomen from the
-weight of the bed clothes which is intoler-
-able to the patient. Also he lies on his
-back with a view of relaxing the mus-
-cles of the abdomen and in some degree
-of obviating the pressure of the bowels
-upon the peritoneum. Professor Woods
-remarks that the supine posture is not
-as minimal as might be supposed.
-He mentions one case which was the
-worst he ever saw in which the
-favorite position of the patient was
-upon his left side, with his legs drawn
-up closely to his abdomen. In by far
-the majority of cases the pain is general

yet sometimes we see cases in which
it is confined to one or more spots
showing conclusively that the inflammation
is local and not general as when
the patient complains of pain over
the entire abdomen, on examination
as soon as the disease has fairly com-
menced there is a feeling of hardness firm-
ness and general elasticity about the abdo-
minal walls and soon the abdomen
becomes tumefied and swollen which
increases as the disease progresses and
finally as it draws to a close becomes
tympanitic. In some few cases however
there is little or no swelling from the
first to the last, but on the contrary
the bowels are compressed by the con-
striction or drawing of the muscles
The swelling is sometimes irregular

-ing like a drum suffused over the whole abdomen, which sometimes becomes permanent, But generally the swelling is uniform and general, During the first stage of this disease resonance upon percussion greater than usual ~~is~~ is discovered, But at a more advanced stage of this affection the sound becomes dull, especially in particular parts, After the disease has progressed for several days the abdomen upon auscultation presents to the ear a sound like something rubbing together, called the friction sound, as is observed in cases of pleurisy, rendered rough by the effusion of lymph which has become coagulated.

The above symptoms are common to this disease, but there are many

which may be added which exist either
from sympathy or which are dependant
upon the rapidly contagious character
of inflammation which characterizes
this disease and which is propaga-
-ted directly to contiguous parts, which
may happen to be of the same char-
acter of tissue. Nausea, Vomiting,
Thirst, Scarcely or entirely suppressed
urine, constipation of the bowels are
usual phenomena, Vomiting is fre-
-quently very distressing, Constipation
is not so frequent as the former of
the several symptoms above mentio-
-ned. But is generally confined to those
cases in which the muscular coat
of the bowels has become involved
in inflammation or irritation, Even
under the latter circumstances diarrhoea

the opposite exists, One symptomatic partic-
ularly characterizes this disease is the pecu-
liar phenomenon which the face presents
being pale contracted and presenting
the appearance of great anxiety and dis-
tress, being so peculiarly characteristic
that the Physician once having seen
them will never forget them. The pulse
is commonly frequent, beating from
one hundred to one hundred and
fifty per minute, and is varied every
now and then, though according to one au-
thor it is sometimes full and not
much increased in frequency, yet this
is certainly an exception to a general
rule. The tongue is generally slightly
coated with a whitish or yellowish fur
is frequently moist, though it is some-
times now dry or nearly natural in

appearance. The patient is wakeful and complains alternately of heat and chilliness. But there is one thing worthy of remark that during the whole course of the disease the patient does not feel much warmer than in ordinary health.

Peritonitis is one of the most rapidly fatal diseases almost of which we have any knowledge. Death not infrequently takes place in twenty four hours and commonly terminates in about a week. The degree of tenderness of the abdomen the pain together with other symptoms indicate the progress of the disease. In fatal cases the pain ceases or nearly subsides, frequently altogether subsides which not infrequently leads the novice to conclude that the patient is better. But it ought to be regarded as the

most insupportable symptom, unless there is a corresponding amelioration of the other symptoms. As the affection advances if fatal, the pulse becomes extremely frequent and feeble, the face ghastly and haggard, the patient appears sunk. The abdomen becomes tympanitic and often flaccid. Hiccough is often exceedingly distressing, accompanied by occasional regurgitation of black greenish matter from the stomach which seems to come from him without any apparent effort. The bowels sometimes commence discharging a black matter similar to that thrown up from the stomach. Convulsions come on not infrequently the harbingers of the fatal result. But those cases which do not terminate in death

but recover are recognised by the gradual subsidence of the pain and tenderness over the abdomen, cessation of vomiting, the pulse becomes less frequent, more full and soft, the countenance less ghastly and anxious and not infrequently recovery is indicated by a free secretion from the skin kidneys & bowels. In some cases the recovery is complete, all the above symptoms entirely subside. In others the recovery is very slow and often imperfect. Sometimes owing to the formation of pus which eventually finds its way into some of the hollow viscera of the abdominal though which it is eliminated and makes its escape. Again the pain and tenderness may continue for an indefinite time, the frequency of the pulse may continue in some degree till after the

patient can walk about. Lastly the acute form may gradually fall into the chronic thus indefinitely postponing and rendering the result uncertain. Besides the varieties of Peritonitis as above described there are several other varieties which I shall only briefly allude to. There is a form of this disease which is sometimes entirely local and which seems confined to one or more portions of the peritonium and may be produced by any violent blow upon the abdomen or may extend by contiguity from any contiguous organ, such as inflammation of the liver, the uterus, the ~~ovaries~~ enlarged spleen or ovaries &c. Sometimes it is produced by obstruction or intussusception of the bowels or hernia or any other cause of a similar character, when produced by either of these causes it is attended ^{with} the most

alarming vomiting of stercoraceous matter
and of irreparable constipation which
follows as a necessary consequence.
In cases having for their origin
inflammation of the Peritonium which
covers the liver, it follows almost as a
consequence that the eyes skin and
tongue are somewhat yellow, which produ-
ces some obstruction in the junction
of that organ which throws a portion of
the bile out of its natural channel (the
bowels) into the circulation. Peritonitis
though a most painful disease as a ge-
neral thing, yet sometimes it comes
on very insidiously with little or no
tenderness, no pain and may produce
death without even being suspected.
But fortunately such cases are rare
and only occur as complications of others.

diseases by which it is disguised
Sometimes this affection is attended by
a Typhoid condition of the system even
from the beginning such as dry tongue
sores about the teeth swollen gums and
delirium are seen with all the sympto-
ms which ordinarily attend cases of
regular Typhoid fever. Another form
of Peritonitis is that produced by the
discharge any matter such as the contents
of the bowels or pus into the peritoneal
cavity. This form is of course necessarily
fatal. And lastly there is another form
which attacks women after confinement
within three or four days or a shorter time
which is called Puerperal Peritonitis and
is by far the most fatal form of this dis-
ease especially when it prevails in an
epidemic form which it sometimes does

Diagnosis When this disease is uncom-
-plicated and attended by the ordinary
Symptoms it is not difficult to dis-
-tinguish it from all other diseases
From all affections ~~affections~~ the bowels
it can be easily recognized by the tend-
-ness on pressure, the constant and
not paroxysmal character of the
pain, the supine posture with the legs
drawn upon the abdomen, by the pecu-
-liar swollen and anxious countenance
and the small corded tense and frequent
pulse, and the frequent constipation
of the bowels. In conclusion of this part
of the subject, I will mention one of
the many symptoms (all of which) I
deem unnecessary to mention, and that
is that there are many affections of
the bowels attended by pain, But in

none is the pain so constant and
which is aggravated in proportion to
the amount of pressure,

Anatomical Lesions

The lesions which are discovered upon
post mortem examination of course
depend upon the causes which may
have produced the disease and also the
duration. If the disease be of long dura-
-tion and produced by the ordinary
causes of inflammation only the pheno-
-mina which ordinarily attend inflamma-
-tion of serous surfaces will be present,
such as redness fibrous deposits
upon the membrane of the surface
Sometimes the cavity contains a free
liquid. If the disease have continued
for some length of time a copious
secretions of a thick yellowish or greenish

exudation, which may cause the
bowels to adhere to one another or
to the sides of the abdomen, Some-
times there is an effusion of blood
which is sometimes taken for mem-
branation. Sometimes pus is found
in the peritoneal cavity, This disease
being dependant upon such a variety
of causes (of course) give rise to
a variety of phenomena dependant
upon the cause which produced it.
Causes

Cold intemperance in eating
or drinking or the suppression of any
habitual discharges, whether healthy or
otherwise, cutaneous eruptions, may
produce this disease and are the
ordinary causes. Sometimes it occurs
secondarily as a complication of other

diseases, especially of those organs which are covered by portions of the peritonium such as the womb &c. Sometimes it is produced by propagation or particular epidemic influence and by a variety of other causes which it is unnecessary to mention. But I suspect, that it is produced ordinarily by Vacuities of the weather &c as any other inflammation

Prognosis.

Is generally unfavorable depending upon the violence of the attack and the exciting causes. But when it exists in a person of good constitution and is unobscured and is treated early and efficiently, it yields to treatment. But it is always a dangerous affection

Treatment

Copious and early depletion is chiefly to be relied upon, the pulse being corded and tense cannot be relied upon as a certain guide, from the fact that the heart is cramped by the violence of the local affection and also from the fact of the pulse being frequent and corded an inexperienced Physician might be misled. As a general rule the pulse becomes more developed under the lancet. The quantity of blood must depend upon the constitution and its effect upon the pulse and also the time of the disease at which depletion is employed. Sometimes it is necessary to repeat the bleeding time and again. At the beginning a large dose of calomel to be followed by

castor oil to fully evacuate the bowels should be given. There it should be kept up actively in small doses combined with some preparation of opium to restrain the bowels as active purgation has been found to be decidedly hurtful by increasing the peristaltic action of the bowels and also the friction of the already inflamed surface of the intestinal canaliculi. After bleeding and free evacuation of the bowels recourse should be had to the use of opium to keep the bowels restrained for twenty four hours or more, for reasons above mentioned. Leeches should be applied to the abdomen followed by warm fomentations. Slight doses of Speucermanaha may be given to act upon the spine.

Blisters should be applied to the
abdomen if the disease advances
and mercury should be employed
in small and repeated doses so as
to produce slight mercurial in-
-flamation which is frequently the harb-
inger of recovery. Having given
the general outline of this disease
in relation to its treatment without
entering into a detailed history of
all the remedies which have been
suggested I will now draw to a close
by asking your kind indulgence
in the perusal of this imperfect treatise

H. H. Trevelyan

January 12th 1867