

AN
INAUGURAL DISSERTATION

ON
Inflammation

SUBMITTED TO THE
PRESIDENT, BOARD OF TRUSTEES AND MEDICAL FACULTY

OF THE
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DOCTOR OF MEDICINE.

BY
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OF
Georgia

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To

Professors

Everett

Buchanan

These lines are

respectfully inscribed

Knowing that an essay on some medical subject was required of each and every student that should come forward for the degree of Dr of Medicine. The thought has long occupied my mind as regards the manner in which that essay should be written. First, how could this essay be made interesting if we should choose some subject and open a book on that subject and copy word by word. That surely could not be considered an essay composed by Ourself. No, it would be copying from some one else's ideas. Secondly, is it thought by the Faculty that we should write upon some disease of which we are familiar from practice.

This could hardly be expected from myself or any other Student. For few Students have had such an opportunity as for my part I availed myself of every opportunity while in the office of any Preceptor. And I know my opportunity was much ^{less} than some others. And can I say that I should have become ^{very} familiar with any of the known diseases without any fear of contradiction? Thirdly, is it thought that we should give the precise treatment for any disease? certainly not for such a thing has never been done by ^{any} of our four fathers who we are engaged in this Profession. We are

taught that diseases in some per-
 sons take on one form and in
 others a different aspect. We are
 taught that remedies will act
 well on one some patients owing
 to the stage of the disease and the
 constitution of the patient while
 on others its effect would be
 entirely different. Fourthly, we have
 at last decided on this course
 I.e. to speak of a disease which
 is met with every day and in
 all classes of Animals both in
 high and lower orders of ~~the~~ ~~the~~
 Inflammation. Shall we call this
 a disease? From its derivation we
 can with propriety so term it.
 Webster gives this definition. In
 Medicine and Surgery, a redness

and swelling of every part of the Animal body attended with heat and pain and febrile symptoms, violent excitement &c. We think after the researches that we have made that we can with greater propriety call it a disease. What does Dr Wood say, on the names for the disorder of the human system? He calls them diseases Enteritis, this is an inflammation of the Bowels, this he calls a disease in all his writing on the subject. The same of Laryngitis, Bronchitis Peritonitis &c. Torrhoea Otitis and a number of other affections of similar character. Believing this to be sufficient to

sustain our idea of the subject. we
 will proceed to ~~speculate~~ of the subject
 as far as ~~we~~ know and when we
 exhaust our ideas on the subject.
 we hope it will not be looked up
 on as a mis if we should speak
 what others have noticed on the
 subject Inflammation how known?
 we were taught by our Professor of
 Surgery (Cove) that it may ^{be} known
 by redness swelling heat and
 pain. Let us pay particular at-
 tention to his remarks. we are
 willing to ^{take} him for our authority.
 Knowing that it might be said
 of him that he could boast of as
 much heroic service as any one
 member of the Medical Profession
 in the United States ———

Beunys is the most reliable sign we have for Infamation. It is of various intensity and shade, owing to the degree of the infamation. Every species of it is observable from a bright rose colour to a crimson or purple hue. It may make its appearance upon the surface regularly or irregularly sometimes oval in shape at other in spots or blotches resembling the appearance of a ball of clay thro wn against any obstacle some of its particles may leave an oval impression while others would be broken up. So I can't with any certainty say it ever makes its appearance uniformly. The bright hue generally found at the

ending a true inflammation. The redness usually disappears ~~instantly~~ pressure and returns when the pressure is removed. The rapidity with which it returns shows the activity of the circulation in the part. What is this redness owing to? To understand this fully we think it necessary to say that if from some mechanical cause (as we generally see it arising from that) and this be great at once it is seen that the adjacent parts become affected, consequently it is due to the increase quantity of blood through the part inflamed. We believe that the vessels become larger in inflammation and such being the case they

carry and increase quantity of ~~the~~
blood. the greater the quantity
more marked will be the degree
of redness " Dr Watson says this
Phenomenon depends upon the greater
quantity of blood contained in
the vessels of the part. and sometimes
also upon extravasation of a portion
of blood into the affected texture.
There are more blood than usual in
those vessels which in the healthy
state are destined to receive and
convey colourless fluid only. or which
naturally admit so few of the
red particles, that from their
paucity, and quickness of their mo-
tion they cannot be seen, this has
been proved by the experiments
of John Hunter and others.

Swelling, this is generally most-marked in the center of the part-affected generally heavier than elsewhere. This is the result of the presence of matter poured into the interstices of the affected part. These effused matters are of various kinds, although they are all modifications of the same liquid of the blood Blood, Serum, albuminous fluid or coagulable. Lymph pus, &c. If any of these are met with it can be said at once that inflammation has been at work. The swelling in a great degree depends upon the structure involved, that of a loose one marked. For instance an abscess of the Gluteus maximus would afford more space for effusion

than that of the arm or forearm.
Some writers have attributed the
pain in inflammation to the
swelling. we are inclined to
combine the swelling with some
of the nerves and if we are allo-
wed to do so, they can have it
from the swelling with nervous
force. Heat in an inflamed
part has been variously explained by
Travers & Liebig & Hunter. he attri-
buted it to the increased flow of arte-
rial blood raising the heat toward
that of the blood at the heart.

Travers, attributed much to the
action of the nerves upon the cir-
culation, whilst Liebig regards
it as resulting from the greater num-
ber of the red corpuscles---

introduced into the vessels the corpuscles being as he supposed oxygen carriers and hence affecting the production of heat by a chemical change in the tissues. We see no reason why Lavoisier and Laplace should not be correct. Some have said that the heat of an inflamed part never exceeded that of the ~~of~~ the body. Mr Hunter made several experiments, and in one case he found an increase of six and three quarters. Showing that the heat had been raised. We are sure that the heat is increased, from our own observations, in life. The same might be said by all that has ever had any experience in this matter. Physiologists have speculated on this subject.

Pain, also attends Inflammation commencing soon after the disease makes its appearance. It varies in degree and intensity. also in structure, we find parts in health having little or no sensibility; such as Ligaments tendons and serous Membranes, when in an inflammatory state become very painful. we are not inclined to believe as some, that it's owing to an effusion or distension of the part affected, but attributed it to the nervous sensibility. we could say a great deal more as regards the cause of pain. believing this to be sufficient. we will next speak of the causes of Inflammation. Much has been written to assign a cause for the happening of inflammation. in any particular part. Wounds. Bruises, foreign matter thrust-

into the flesh, and other similar
 causes, are obvious to all. Exposure to
 cold or heat: are also obvious causes;
 but, in the great majority of the cases
 in which we meet inflammation, we
 search in vain for any cause from
 which it should have happened,
 in any particular spot. Some writers
 contend that it is from a congested
 state of the blood, be it so. We are
 some what inclined to differ with
 them. For inflammation can be
 produced in almost any part of
 the body in twenty-four hours by
 any of the above mentioned causes
 while if we congest a part by
 bandages it would take days
 and even weeks, to bring about
 an inflammatory state of the system or member

The ... of ... (...)

"Dr Watson, says it is more easily excited by many external causes and therefore it is more common than any other special disease. A great majority of all the disorders to which the human frame is liable begin with inflammation, or end in inflammation, or are accompanied by inflammation during some part of their course, or resemble inflammation in their symptoms.

Most of the organic changes of the different parts of the body originate inflammation as their cause, or lead to it as their effect. In short a very large share of the premature extinction of human life in general, is more or less attributable to inflammation. Again, inflammation is highly interesting not only in its morbid phenomena

and destructive consequences, but in its healing tendencies also. It is by inflammation that wounds are closed and fractures repaired - that parts adhere together when their adhesion is essential to the preservation of the individual - and that foreign and hurtful matters are conveyed out of the body. "Dr Watson says of inflammation, that we can at our pleasure excite and regulate this influence to a great degree." One of the most common consequences of inflammation is the production of pus or matter. This substance differing so widely in its appearance, from the blood, is, nevertheless, a product from that fluid. It has on examination with a Microscope a much closer resemblance to blood

than would at first appear. Pus is
formed of globules, as well as blood;
and some have thought, and
with great plausibility, that
pus is identical with the red glo-
bules of the blood, except that it is
divided ^{into} of its coloring matter. The
watery portion, or serum of the blood,
is separated from it in some instances
of inflammation. It is seen to transude
or exhal from the surface of the
membranes which are inflamed.
Ulceration, or the absorption of infla-
med parts is another termination
of inflammation met with. This is the
particular obstacle to the healing
of ill conditioned ulcers, and
we notice not only the skin and
and adjoining parts are absorbed,
in this way, but fat and even

Bones is subject to this curious process. Ulceration is mostly common in the skin, and depends on the absorption which has been caused by a high degree of inflammation. But it occurs also in other parts of the body; arteries and even bones are subject to ulceration. It is more rare in fibrous or serous tissues, such as the lining of the lungs and the ligaments about joints. In all these parts are subject to be penetrated by pus, when it originates in such a situation that it cannot readily escape through other tissues. Healing is opposed by absorption, by sloughing or by fungous flesh. Suppuration or the formation of pus is a common termination of inflammation

Pus, when light colored, inodorous, and about the consistence of cream, is called healthy, because the product of such pus is the best evidence that the part which has produced it, will readily heal. The common course of inflammation is to throw out lymph first, and pus next. In the solid parts of the body, the pus makes for itself, a chamber towards the surface of the body, it gradually progresses, till burst and escapes. It is not always however, that pus presents the above appearance. It is sometimes thin and watery, having the appearance of oil; and in such cases, we do not look for so favorable a result. It is comparatively harmless however, so long as

The air is excluded; but as soon as it comes in contact with the atmosphere, putrefaction commences; and from this cause wounds become offensive. Inflammation of the internal organs, is the great foundation of many diseases.

But we are hindered from that inspection which would enable us to decide on its character and danger. The symptoms which it produces, have been a matter of deep study and investigation; and here, above all others, has the dissector, in his post mortem examinations, lifted the veil from this obscure subject. The physician now goes forward with a greater degree of confidence, that he understands these diseases ---

The leading symptom which attends them, is fever; and fever which has been termed inflammatory, for the good reason that it is produced by inflammation. It is many times, uncertain whether the fever has produced the inflammation, or the inflammation the fever. One thing however we should bear in mind, that the importance of the case does not depend upon the degree of fever which attends it: Great is the variety of inflammation, as it makes its appearance in the various tissues of the body. Abscess, a common consequence of inflammation, is most commonly seated in that membranous organization, immediately below the skin containing fat.

Inflammation has been divided into two great classes - the acute and chronic. The acute, with symptoms of great violence and rapid progress - the chronic, with symptoms mild and slow. Between these great classes no exact line can be drawn; nor is it of much consequence in a practical point of view, if acute inflammation runs to a speedy termination, and develops the danger at once; but - Chronic inflammation may be none the less dangerous for its slow progress. Indeed it is this form of inflammation which produces the greatest change in the substance it attacks - such as thickening the covering of membranes & pus formation

There is an inflammation which has been called latent: because it is unattended with pain and productive of none of the ordinary symptoms of inflammation. Except by the lately invented system of investigation by auscultation, these diseases, when they attack the deeper seated organs, would remain unknown during the lifetime of the patient. In the ordinary classification of inflammation which has been made on the rapidity of its progress, there are varieties which depend on the specific character of the disease in which it occurs. The most important ^{of all} ^{chronic} inflammation ~~are~~ that attending Scrophular---

In inflammation a destructive process. we are compelled to say that it is, we see the result of inflammation if left to itself is Gangrene and from Gangrene to Mortification, which is known by all to be a deadening of the part whether of the soft parts or of the bones. We believe that inflammation of the Osseous S^h be the same as that of the soft parts. Firstly we have simple Inflammation Secondly Ulceration, thirdly Caries, fourthly, Necrosis when we trace this disease in both the soft and hard parts we find them the same

Treatment

Can we give any precise Treatment for this disease; we are to be governed by the organ engaged also by the symptoms as they present themselves to us

Antiphlogistic remedies present themselves to us at once. First a proper regimen, and the removal of all present causes of the disease. The most important of all remedies for Inflammation is bloodletting.

This remedy has maintained its grounds from the earliest ages, and under every change in theory or doctrine.

It is employed in various ways,
by leeching, cupping or
scarification, or by opening
a vein or artery with a lancet.

As regards the quantity
to be drawn depends upon
the age and constitution
of the patient labouring
under the disease. And
it is a question among
some how much blood
should be drawn and
whether or not it should
all be taken at once.
We believe in taking
as much as the patient
can well bear and think
it best to deplet the Sys-
tem at once. Though we
should always be governed

by the symptoms presented to us, in such cases... we may abstract blood both General and local but as a general rule would prefer the local method, especially if the disease be superficial, when deep seated as a general rule we cannot reach it by our local means, then we are compelled to resort to general bloodletting."

Purgatives, are considered powerful remedies for the removal of Inflammation. they are proper where there is much fulness of the blood vessels, and a torpid or inactive state of the bowels.

A, very active Cathartic for the reduction of Inflammation is composed of Cream of Tartar and Jalap. Epsom salt, Senna, and Salt, Seidlitz Powders, and other similar Cathartics are considered particularly suited to this purpose. Mercurials are also used with great benefit, not only for their Cathartic effects but as an alterative in many cases. Calomel the most common employed ---

Opiates. This at first will appear strong when we think of its Stimulating effects. But this is not a mere Stimulant; it is also a powerful Sudorific and anodyne ---

If called upon to treat this disease we think that we would not be at any loss for remedies, In writing our remarks have generally been connected with some local inflammation, of no one particular part. we have many remedies to be found in the domestic practice, such a emollients Poultices &c. &c. we may treat inflammation by heat and moisture, also by cold application. we are by this like it would be with any other disease, as regards the treatment. we doubt the propriety of any one certain rule for treating diseases we think they should be

delt with according to
the age & Constitution,
and Circumstance under
which they labour, should
have a decided influence
with us a Man of Science
learning and Judgment
we have no particular
recipes believing all such
to be faults we offer none
more than we have already
given, Hoping nothing
more to be required of
us we leave the Subject
for the Consideration of
abler persons than myself
To the able faculty of the
Medical department of the
University of Nashville