AN INAUGURAL DISSERTATION ON INFARCTION

SUBMITTED TO THE PRESIDENT, BOARD OF TRUSTEES AND MEDICAL FACULTY OF THE UNIVERSITY OF NASHVILLE, FOR THE DEGREE OF DOCTOR OF MEDICINE.

BY

DAVID A. JAMESON

OF GEORGIA

1858

JOHN YORK & CO., BOOKSELLERS AND STATIONERS, NASHVILLE, TENN.
To Professor Ere

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 Do 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 barely could not be considered an essay composed by oneself. Or, it would be copying from someone 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 than some others. And can I say that I should have become familiar with any of the known discourses 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 farthers who are engaged in this profession. We are
taught that disease in some persons 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 §2 to speak of a disease which is met with every day and in all classes of animals both in high and lower orders of its nature inflammation. Shall we call this a disease? From its derivation we can with propriety so term it. Webster gives this definition in the Medicine and Surgery a redup
and swelling of every part of the animal body attended with heat and pain and febrile symptoms; violent excitement etc. We think after the researches that we have made that we can with greater propriety call it a disease. What does Dr. Wood say such names for the disorder of the human system? He calls them disease. 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 & Tubulosa Otitis and a number of other afflictions of similar character. Believing this to be sufficient-
sustain our idea of the subject. We will proceed to speak 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 think the subject what others have noticed on the subject. Inflammation how known? We were taught by our Professor of Surgeon (Eve) that it may be known by reds, swelling, heat, and pain. Let us pay particular attention to his remarks, we are willing to take him for our authority. Knowing that it might be fame of him that he could boast of so much heroic service as any member of the Medical Profession in the United State.
Reguns is the most reliable sign we have for inflammation. It is of various intensity and shade, owing to the degree of the inflammation. Every species of it is observable from a light rose colourful to a crimson or purple hue. It may make its appearance upon the surface regular or irregular, sometimes oval in shape at others in spots or blotches resembling the appearance of a ball of clay thrown against any obstacle some of its particles may leave an oval impression while others would be broken up. So the cant with any twenty say it ever makes its appearance Uniformly. The bright one generally found at
ending active inflammation. The redness usually disappears when the pressure is removed. The rapidity with which it returns shows the activity of the circulation in the part. What is this really owing to? To understand this fully, we think it necessary to say that it is often arising from some unknown 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 blood. The greater the quantity more marked will be the degree of sedence. 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 tissue. There are more blood than usual in those vessels which in the healthy state are destined to receive and convey coloreous fluid only, or which naturally admit as few of the red particles, that form their opacity, and quickness of their motion they cannot be heard. This has been proven 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 subcutaneous 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 cellular. Lymph fluid. If any of these are put out with it can be seen at once that inflammation has been at work. The swelling in a great degree depends upon the tissue involved, that of a loose one marked. For instance an abscess of the subcutaneous matter would appear our escape for effusion.
from 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 allowed to do so, they can have it from the swelling with nervous force. Heat in an inflamed part has been variously explained by Travers and Liebig and Kuntsch. He attributed it to the increased flow of arterial blood raising the heat toward that of the blood at the heart. Travers attributed much to the action of the nerves upon the circulation, whilst Liebig regards it as resulting from the greater number of the old corporcles.
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. Were no reason why it would not be correct. Some have said that the heat of an inflamed part never exceeds that of the air of the body. Mr. Hunter made several experiments, and in one case he found any increase of six and three quarters. Showing that the heat had been raised. We are sure that the heat is increased from over our observations in life the same might be said by all that have ever had any experience in this matter. Physiologists have spoken later on the subject.
Pain, also attends Inflammation, commencing soon after the disease makes its appearance. It varies in degree and intensity, also in extent, we find parts in health having little or no sensibility, in the 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 insufficient, we will next speak of the cause of inflammation. Much has been written to assign a cause for the happening of inflammation, in any particular part. Wounds, bruises, foreign matter, other things—
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 conjunct 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 mention causes while if we confine a part by bandages it would take days and even weeks to bring about an inflammating state of the system or member.
"Dr. Watson says it is more easily excited by many external causes and therefore it is more common than any other 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 oeckonize 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 for its morbid phenomenon..."
and distinctive consequences, but in its healing tendencies also. It is by inflammation that wounds are closed and fractures repaired—shot-powder together when their adhesion is essential to the preservation of the individual—and that foreign and hurtful matters are conveyed out of the body. "Do not on days of inflammation, that we can alter our pleasures at all and regulate its 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. Proc is formed of globules, as well as blood; and some have thought, and with great plausibility, that Proc is identical with the red globules of the blood, except that it is divided of its coloring matter. The watery portion, or serum of the blood, is separated from it in some instance of inflammation. It is seen to transude or ethale from the surface of the membranes which are inflamed. Ulceration, or the absorption of inflamed parts are another termination of inflammation cut with. This is the particular obstacle to the healing of ill conditioned ulcers, and we notice not only the skin and ane adjoining parts are absorbed, in this way, but fat and even
Ulceration is most 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 cavities are subject to ulceration. It is more rare in fibrin or dense tissue, such as the lining of the lungs and the ligaments about joints. It is 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 propels till bursts 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 study and investigation; and here, above all others, has the dissection, 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 white, 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. Acrid, a common consequence of inflammation, is most commonly sealed in that membrane or 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. Believers in these great classes no exact line can be drawn, nor is it of much consequence in a practical point of view. 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 the hardening of membranes subsequently.
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 arcs and excitation, 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 inflammation are the attending septicular.
So 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 decaying of the part whether of the soft parts or of the bones. We believe that inflammation of the Osseous to 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. Antiflphlogistic 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 ground 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, coloring 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 deplete the system at once. Then we should always be governed
by the symptoms presented to us in such cases... We may abstract blood from the general and local, but as a general rule, we 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. Perspiratives 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 blood...
A very active cathartic for the reduction of inflammation is composed of Cream of Tartar and Jalap. Epsom salts, linseed and salts, Seidlity Powders, and other similar cathartics are considered particularly suited to this purpose. Narcotics are also used with great benefit, not only for their cathartic effects but as an alternative in many cases. Colonc The most common employed Opiates. This at first sight 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, if no one
particular part. We have
many remedies to be found
in the domestic practice, and
a compound Poulten's etc.
we may treat inflammation
by heat and moisture, also
cold application. We are
by this like it would be with
any other disease, assigns
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 Left 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 offence 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 able persons than myself to the able faculty of the Medical department of the University of Nashville.