

AN

INAUGURAL DISSERTATION

ON

*Inflammation and Ulceration of
the Cervix Uteri.*

SUBMITTED TO THE

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OF THE

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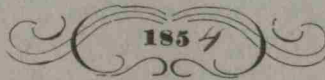
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It is demanded of each student of medicine, who presents himself for the honor of the degree of M.D. to the faculty of this institution to write a Thesis upon some medical subject, and where there are some seventy five who are candidates for that honor in this institution, there is scarcely a subject but what has been selected by some student. And as very few have written upon the diseases of the uterine organs, I have selected for my essay, Inflammation and ulceration of the Cervix Uteri. But before going into the investigation of the various pathological phenomena which presents themselves in the various diseases connected with this important organ, it is necessary to notice the anatomical structure and physiological functions of this organ. Though it is not my intention to go into the minute anatomical structure and physiological functions of this organ but merely, to point out the features of its structure and functions which bear closely upon its pathological

conditions. The uterus is a very peculiar muscular organ. In its virgin or non-pregnant state weighs from one to one and a half ounces. Its muscular tissue is in a complete rudimentary state, its fibers being so closely compact and interwoven, that it looks more like a mass of fibrous tissue than that of muscular structure, But on the contrary, the impregnated uterus is easily demonstrable, the muscular fibers lying in bands circles and ellipses which are very perceivable to the slightest glance, It is then a highly vascular organ, and instead of weighing one or one and a half ounces, as in the unimpregnated state, It now weighs several pounds, Its arteries and veins distended with blood and its vitality exceedingly great and indeed it becomes an exceedingly vitalized organ; and in consequence of this great-physiological change in the structure and functions of this organ, diseases of various grades and character must be a necessary result. In the unimpregnated state these phenomena rarely

occur; owing to the extreme condensation of the fibrous tissues, the blood vessels are very small and so compressed as to admit of but very little red blood to circulate in them; and as a necessary result of those anatomical facts, the vitality of the nonpregnant uterus is very low; therefore it is seldom attacked with inflammation; and when it does occur, it assumes most invariably a chronic character. There is considerable difference between the anatomical structure and physiological functions of the uterus and its cervix. They both have muscular fibers and supplied with blood vessels and nerves. But the cervix is freely supplied with cellular tissue and is much more freely supplied with nerves and blood vessels; a condition which greatly increases its liability to inflammation. In viewing the anatomical structure of the body of the uterus in the nonpregnant state is devoid of cellular tissue; and presents a very muscular structure, and its cavity is lined

onely by a elementary mucous membrane, on
the contrary; the uterine neck contains cel-
lular tissue; is of a less dense structure; is
more vascular and has a cavity quite distinct
from that of the body of the uterus; and is lined
by a thick vascular mucous membrane studded
by numerous mucous follicles; we also find that
immediately adjoining the uterus; are several organs
lying in a bed of filamentary cellular tissue; between
two peritoneal folds, but without the peritoneal cavity
and they themselves containing cellular tissue and
freely supplied with blood vessels and nerves; With
regard to the physiology of the uterus throughout the
whole period of its non-pregnant state; it has an
important function to perform; that of menstruation.
The function of menstruation consists of a perio-
dical secretion, or excretion of a certain quantity
of blood from the cavity of the uterus; menstruation is
preceded, accompanied and followed by a determination

of blood to the uterus, If an examination be made a few days; or during; or a few days after menstruation; The mucous membrane will be found turgid and of a deep red color establishing the fact of a considerable passive congestion of this organ. When there exists a disease of this organ; the congestion often extends to a much lengthened period, and must necessarily be greatest in the most vascular part of the organ. The mucous membrane lining the cervix. As the periodical return of menstruation is most generally every four weeks and lasts for several days and, a few days before and after menstruation this molimen hemorrhagicum must last some eight or ten days. It thus appears that one third of each month; the uterus of a menstruating female is in a physiological state of congestion; a state which immediately precedes inflammation; and nearly all the female who apply for medical aid when labouring under some uterine affection will be found on a careful examination; labouring under this disease. You will often be req-

- acted to prescribe for leucorrhoea or Whites, menorrhagia
dysmenorrhoea prolapsus and irritable uterus; all these
symptoms of diseases are immediately the result
of inflammation of the cervix uteri and are to be
treated successfully only by attacking the primary
disease to which they owe their origin; and more
especially chronic leucorrhoea when it is present, and
accompanied with menstruation. Having said this much
upon the physiological relation of this organ, I will
first notice the diseases incident to the virgin female.
Inflammation of the cervix uteri may commence in
the mucous membrane lining its cavity, or the mu-
-cous follicles which that membrane presents; though in
the majority of cases both are implicated; prior to
menstruation the uterus is dormant its vitality is
very low and is very little exposed to inflammation.
Menstruation once established as a very different
state of things intervenes. The uterine system becomes
more vitalized and at each menstrual period

This organ is in a passive or physiological state of congestion, But so long as this physiological state of congestion remains in its proper bounds; it is nearly an element of its natural functions unfortunately this is not always the case. In some females; this congestion is morbidly great; and menstruation is attended with a great deal of pain throughout the whole period of menstrual life. In all females the catarrhia is liable to be perverted increased diminished or suddenly arrested by a host of exciting causes. and when that is the case; the natural uterine congestion may become morbid; and these give rise to inflammation; and this is not unfrequently the cause of inflammation and ulceration in the neck of the virgin uterus; In the married state there are other fruitful causes of this disease; even when conception does not take place. the congestion and excitement which follows sexual intercourse may, if too frequently renewed; give rise to inflam-

mation; or the same result may arise from physical contusion of the organ itself; In some females the uterine system is so extremely sensitive, that inflammation follows intercourse, when the bounds of discretion has not been overstepped. When Conception has taken place a new vasa adorns upon the uterus and its appendages instead of remaining in its quiescent state only disturbed at its regular periods, It assumes a high degree of vascularity and becomes the seat of the most active nutrition and rapidly increases in size; all the vessels become enlarged and distended with an active circulating fluid. This conception itself may be considered a predisposing cause of inflammation. Parturition is also a frequent cause of inflammation and ulceration of the os and cervix by mechanical pressure upon these organs; producing lacerations contusions and even mortification

The symptoms of inflammation may be local, or constitutional. The local symptoms may be divided into

anatomical and functional changes in the organ itself. The constitutional symptoms, are those which manifest themselves in the general constitution of the patient. The anatomical symptoms; are those which manifest themselves by the touch, and speculum; in the appearance form and structure of the cervix uteri, when ^{the} mucous membrane is inflamed. It ceases to produce or present to the touch, that unctious and smooth appearance; that it does in health. It becomes tumefied and enlarged; and from its weight most always falls more or less into ^{the} vaginal cavity, and when brought into view; by the aid of the speculum; instead of presenting the pale rose color of health, it presents a vivid red tinge and dotted with florid papillæ; or with white papillæ of pus; and often considerable ulceration with increased heat of the parts; and pain upon the slightest touch; and frequently complains so it is a matter of impossibility to get them to submit ^{to} the necessary examination. There will be found important modifications

Taken place; both in the os and cervix. In the healthy condition, the os uteri is closed so as to barely admit of a small size bougie. But when in a state of inflammation, it expands and is considerably opened; the discharges from the ulcerated surface: where ever its seat; is purulent, the pus may be thick and of a healthy colour; or it may be thin and sanous according to the state of ulceration. When the secretion is abundant or mixed with mucous; the patient is said to have the whites, Inflammation of ^{the} Cervix uteri: when severe; often exerts considerable influence upon the rectum, also the urethra seriously affecting the proper or natural functions of those organs. The constitutional symptoms, are numerous in this affection; Pain in back or lumbar and sacral region; the patient feels and complains as if her back was broken and can neither sit or stand erect with any degree of comfort, and the pain radiates or extends all over the lower hip & gastric region; these are other pains

present which must be attributed to the same cause. The patient often complains of pain in the hips groin and down the thighs. The periodicity of menstruation is often changed in this disease, the menses either return too frequent or are retarded, in its manifestation, The influence of ^{the} uterine inflammation upon digestion is the most marked and important of all the sympathetic relations we have to meet with, with some the digestion is merely weakened, but with the majority of cases; the digestion is seriously impaired and a host of morbid symptoms supervene, such as dyspepsia gastralgia; and to such a degree as to divert both patient and physician, from the true source of the disease; There is frequent pain in the region of the stomach; in the chest under the ribs of the left side; and in the region of the heart; the pain is of a dull aching character. The patient often complains of heaviness and pain in the head; and cannot sleep without being disturbed or affrighted.

with disagreeable dreams; The kidneys are also sympathetically affected in inflammation and ulceration of this organ. We often find the lungs sympathizing in this disease. The pains radiating all through the chest, and so severe, as to interfere with the action of the lungs and renders respiration difficult and laborious. The function of nutrition often becomes impaired. The patient becomes emaciated, pale, sallow, languid, and weak, and generally falls into an anemic state. I have briefly sketched at most of the important symptoms both local and constitutional in this affection. No patient will seldom have all those marked symptoms, but most cases will be attended with a majority of them. -

Treatment. In considering the means best adopted to the treatment of the diseases of the Cervix uteri, we will first take up the treatment of simple inflammation, without ulceration, and secondly inflammation with ulceration of the

Cervix uteri; Simple inflammation of the mucous
membrane lining the neck of the uterus, in
its incipient stage; can be subdued by emol-
lient and mild astringent injections with the
tepid hip bath and attention to the general health,
though the physician is hardly ever consulted in
this stage of the disease; but if called to a patient
labouring under this form of the disease, vaginal in-
jection properly used constitute a valuable means
in arresting the disease, Water alone or slightly
medicated, or cold water freely injected into the
vagina several times per day; so as to dislodge and
remove all secretions from the inflamed cervix will
perform an important part in the therapeutic
treatment of this disease, The patient must be
in the recumbent position; and remain in
that position for some time, If you wish the
case to be benefited by the use of vaginal injections,
Medicated injections may be either emollient

anodyne astringent, with and water, or a
decoction of marsh mallows; used tepid or cold,
The anodyne injections consists of various anodyns
combined with the emolient injections, I do
not believe; They are of much importance how
- ever they are very frequently resorted to, The extract
Hyosiamus I prefer to all others of this class;
Astringent Injection are the most valuable
remedy in this affection; Those that are generally
employed are numerous, Alum, Sulphat of zinc
acetate Lead, Nitrate of silver and decoctions of
oats bark. of this class of vaginal injection
Alum is most generally preferred in mild cases
as all families have it; and are familiar with
It, and will use it more readily, than any other
article; and this preparation will accomplish all
that any of the injection will; except the Nitrate
of silver, The nitrate of silver stands at the head
of the list; of all applications in this affection

and should be used so as to reach every part of
the inflamed surface; and to secure which, the
patient should be in the recumbent posture, when
the injection is administered, and the injection
should be administered by an assistant, Sips and
shower baths will decidedly benefit the patient and
should be neither too warm nor cold; the patient reg-
ulating the temperature by her own feelings. Local
depletion by the application of leeches to the inflamed
surface or in the neighbourhood of the inflamed
part, aid materially in subduing the inflammation,
Considerable benefit can be obtained; by scarifying
the cervix; so as to relieve the local congestion of
organ; Cupping the loines often affords considerable
relief, with attention to the general health of the patient,
with the local means that has been mentioned, is
all that is requisite, or necessary in the treatment
of simple inflammation of cervix uteri. In the
treatment of ulceration of the cervix uteri

In addition to the local means above mentioned; other and more efficient; - becomes necessary; In cases of slight ulceration of the cervix may be relieved by the local means enumerated; for the relief of simple inflammation of the cervix; such results however; are rarely obtained; and it would be irrational to attempt a permanent cure, of this disease, when once satisfied of the existence of ulceration of the cervix uteri by ocular demonstration by means of the speculum; although great relief may be obtained by such a course of treatment, and the patient may be led to believe that she is permanently relieved, but after a discontinuance of the treatment, the disease will soon manifest itself again; and all the time employed in attempting a cure by these means; is lost. And once the existence of ulceration is ascertained, to exist in the cervix; other and more efficient means should be resorted to.

For by endeavoring to affect a cure by those means
The disease is incidentally encroaching upon the con-
stitution of the patient, and becoming more perman-
-ly seated, and consequently more resisting to the
proper remedial agents, Then the most efficient
means in our power should be resorted to, at once,
That is cauterization; This can be effected by the
direct application of Nitrate of silver in substance
or a concentrated solution applied by the means
of a camomile hair pencil; and if the hair pencil
cannot be procured, moisten a small piece of
soft sponge and apply it directly to the inflamed
surface, In order to do this effectually, a speculum
must be introduced, and the ulcerations exposed
and the speculum suffered to remain until the apply-
-cation is made, which will require some ten or fif-
-teen minutes, But previous to the introduction of
the speculum, the cervix should be thoroughly cleaned
by frequent injection of tepid or milky water

in order to dislodge all matter or pus from the ulcers, that you may ascertain the extent of ulceration and apply the caustic affectually to the ulcers, But previous to the application of this remedy, all local or general inflammation should be subdued by local or general blood letting in conjunction with saline cathartics and emollient injection. After the first application of the caustic, it should be repeated every fourth or fifth day, until the ulcers completely cicatrised. For if you suspend or withhold the treatment cicatrization ceases and the ulcers will spread and go back into the same unhealthy state again. There are a great many cases which will not yield to so mild an escorotic as the nitrate of silver. In such cases as will not yield to the nitrate of silver, the best application is caustic potassa This is the most powerful escorotic we possess and should be

used with a great deal of caution, there are several preparations expressly prepared for cauterizing ulcers within the cervix uteri, the one most generally used is in sticks similar to the sticks of the nitrate of silver, those sticks of caustic potassa are combined in various proportions with lime great precaution should be observed in the application of this potent remedy to protect the surrounding parts of mucous membrane of the vagina and cervix uteri, Cotton moistened with some vegetable acid, should be introduced, prior to the application of the potassa, and when the potassa is applied, the Cotton should be placed in contact with the ulcers, and suffered to remain for several hours, and then removed, and the part thoroughly washed by injection of tepid milk and water, this application should not be reapplied oftener than once in every four or six weeks, and the part should

be Touched once every six or eight days, with a strong solution of Nitrate of silver, to check or keep down the luxuriant granulations which will spring up from the application of the caustic potassa. Other remedies of this class have been employed successfully, The mineral acids and the actual cautery, but I think they are much inferior to the nitrate of silver and caustic potassa, and that they are highly objectionable, The acids on account of the liability to spread and cauterise the surrounding healthy parts; The actual cautery cannot possess any superior advantages over the caustic potassa and has connected with it many valid objections to the female, The Solea of introducing a red hot iron into the vagina is frightful to a female, and perfectly revolting to her feelings, and it requires great caution in applying it, for there is considerable danger

of injuring the surrounding parts, I have said all that is necessary in the local treatment of this affection, I shall now make a few remarks upon the constitutional treatment, all that is necessary, is a proper regulation of the patient's diet, and a proper amount of exercise, The diet should consist of a simple nutritious vegetable diet, allowing some animal diet of the most digestible kind once every Twenty four hours, and that should be taken at dinner, There is a gross error amongst most physicians, and the people in general in regard to diet in this affection, They are in the habit of prescribing or allowing the most stimulating articles of food in affections of this kind, believing that all that is necessary for the complete restoration of the health of the patient, is to allow them a very rich stimulating diet, in conjunction with Tonic medicines and Stimulants, such as brandy wine &c. Nothing can be more absurd or so pernicious to the

to the health of the patient. Where this disease is of long standing, the secretions of the liver becomes impaired or suspended, and digestion becomes very imperfect, and the patient is often troubled with attacks of dyspepsia, and to relieve this affection all that is necessary is to give a mild mercurial occasionally combined with a little rhubarb, or to relieve an unpleasant sensation about the stomach after eating, give a few gr of the sub-nitrate of Bismuth. The kidneys are often sympathetically affected in the course of this disease, in order to relieve that, it may become necessary to apply leeches over the kidneys, or cups to relieve those organs. It may be necessary in conjunction with the local means, to administer diuretics.