AN INAUGURAL DISSERTATION
ON
Amenorrhoea

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BY
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To

John M. Watson M.D.,
Professor of
Obstetrics and Diseases of
Women and Children
In the
University of Nashville
As a Testimony of respect
For His
Talents and Professional attainments
This Thesis is Respectfully
Inscribed

By the author
Amenorrhoea
The disease I have chosen as the subject of my thesis, being the disease most commonly affecting women while performing that natural phenomenon of her nature, (menstruation), which particularly characterizes her from all other animals of God's Creation. Woman, mysterious and pleasant creature, who is he that could conduct himself otherwise than in the most affable manner towards her while performing that high, though troublesome and unpleasant function which is absolutely necessary in bringing about those high physiological changes in her system, preparing to the propagation of our species.
would (may I be allowed the
harsh expression) be suited to
the accomplishment of deeds of
the darkest but conceivable.
But, let me turn more directly
to the subject under consideration,
lest it be thought, I have digr-
ecerated from the channel I should
confine myself while attempting
a description of the above malady.
I will make a few precurson
remarks on menstruation, in order to
e elucidate my subject a little more
clearly. This function when normal,
appears about every twenty-eight
days, commencing between eleven
and twenty years of age, and,
continued during a period of thirty
or thirty-five years; however some
women menstruate about every twenty
one day without experiencing any deprivation of health. This discharge is an exhalation of blood, coming from all the internal surface of the uterus, except its neck, in a more or less impure state, being mixed with vaginal mucous and other glandular secretions, from the cervix uteri and external organs of generation. It also varies in quality, as well as, times of discharge. In one woman not exceeding an ounce at a time, while on the other hand another habitually emits fifteen ounces at each period; thus we see plainly every woman establishes a law—peculiar to her own constitution. When this law fails to be observed in her nature, we have the first form of amenorrhea; called
intensio menstruum; of this form I will make two varieties for the purpose of description.

1st. Amenorrhoea—dependent on congenital deficiency, malformation, or structural disease of the genital organs.

2nd. Amenorrhoea when there is a slow and imperfect development, or an entire absence of puberty. Causes—of the first form and first variety. If uteri may be incompletely developed or absent altogether. The canal of the os or vagina may be either absent or impermeable, or there may be an imperforate hymen. When the uterus is absent, the development of the body may be unaffected by it, the health perfect, indeed the woman
may be a complete model of beauty; but when the catamenia is pent up, prevented escaping by reason of an impervious os, vagina, or an imperforate hymen, thereby distending the uterus to an alarming degree, pressing upon immediate organs, with a periodical effort to menstruate, and impaired general health.

The absence of the ovaries, whether this occur by the ravages of disease, or by a surgical operation, are also causes of retention of the menses, as also, any disease of the ovaries that may cause a change of their structure; as an atrophied condition may cause the function either to cease, if once established, or if never having been established, will prevent the establishment while such a condi
tion continue to exist. The symp
toms indicating this condition of the
patient does not unfortunately,
always portray the true nature
of the disease. But we generally
find them as follows. The body
is generally well developed, the
circulation regular and of normal
frequency and force, the organic fun-
tions fully performed, yet, there
are signs showing all things not
right with her; the breasts are
not as prominent, the sexual
propensities are dormant, the voice
is graver than common in woman,
a slight beard on the upper lip,
and a kind of mixture of masculine
and feminine disposition.
Prognosis – This must necessarily be
unfavourable; where, there is extensive
organi<e> disease of the uterus or ovaries. In neither condition can menstruation take place; it is not therefore probable that the health will remain unimpaired. Though, if such an individual escape phthisis, she may, and often does, become robust and vigorous. Where other malformations are present, the prognosis must mainly rest on the nature and extent of the obstacles; and on the probability of surgical relief.

Treatment—Where the uterus and ovaries are wanting, the case is irreparable. When there is an occluded, an imperforate hymen, or a septum across the vagina, the cure may be accomplished by the surgeon's knife, frizer or bougie. If the cervix uteri exist without a peniveous canal
a small trocar or firm bougie in
the hands of a skillful surgeon,
may effect an artificial opening.
To prevent this artificial opening read
lying, tents of soft linen well oiled
should be kept inserted. In case
the vagina be entirely obliterated or
only a small space be left between
the rectum and urethra, a puncture
may be made through the rectum, or
the parts may be gently torn asunder.
After this operation, close attention
should be given to prevent, or comb-
atate peritonitis, should it set in;
Opiates, laxatives, leeches, somet-
tions and cold applications to the
abdomen may be used with advantage.
Menorrhoea—where there is a slow,
and partial development, or an
entire absence of puberty.
Causes and symptoms—As I have previously remarked, the time varies considerably at which puberty begins in different countries, as well as in different women residing in the same district of country. This absence of it must not therefore be considered disease, when it does not occur at the usual period, but only when attended with acute lesion of health. This delay may depend on idiocy, delicacy of constitution, or by a tardy development of the system generally. It is often caused by close confinement in schoolrooms, factories, or other apartments. Again, in this form of the disease there may be either a plethora habit of body, or a pale, weak and delicate constitution. The symptoms vary much in each condition. In the former, the constitutional signs are more...
severe, with some febrile action, flushed face, thirst, and heat of the skin, while in the other, the sympathies of distant organs are made known more slowly. They have little or no fever, pulse but little altered, no thirst, no heat of the skin, and a disposition to eat indigestible substances. In both these varieties there may be an effort to menstruate each month, made known by pain in the back and hips, in the lower part of the abdomen and down the thighs, these after lasting a day or two, pass away without any discharge; therefore one ought not hastily conclude that puberty will not be established, and still less so, when the non-appearance does not depend upon congenital deficiency or disease.

Pathology—This is sometimes
very obscure but most generally depends
upon the life force of the nervous system,
or upon the superabundance of the solids
of the body, or the reverse condition.

Diagnosis—There is little difficulty when
the disease is seen early, in forming a de-

dcided opinion of its precise character.
At first, there is neither anaemia nor
palor, and when subsequently present
the history of the case will prevent error
in distinguishing this, from other forms
of amenorrhoea where the discharge is re-
tained in the uterus or vagina charac-
terized by an increase of the uterine region
and pressure upon neighbouring organs.
This state of things may be distinguished
from pregnancy by an examination per-
vaginum.

Treatment—Where the disease arises
from too close confinement and over-taxing
as is often the case in schools and fac-
torial, removal to the country, exercise
in the open air, regulation of the clothes
and diet, in most cases, will be sufficient
to establish the function.
When the patient is plethoric and there
is a decided uterine effort, will require
general depletion; leeches or cups to the
loins, hip, bath, and occasionally a bisk
purgative, composed of rhubarb alco-
and aferetida. In anaemic condi-
tions use the vegetable and mineral
tones, such as gentian, quinoa or colom-
bio, and the carbonate, sulphate, or
iron by hydrogen. The muriated tincture
of iron is also valuable in the treatment
of this form of disease. The bowels should
be kept in a soluble condition, clothing
warms, diet nutritive, and moderate
exercise in the open-air.
But should these foregoing means only improve the general health, without the establishing the catamenia, then we may with propriety use determining means as the warm hip bath, frictions to the loins, with stimulating ointments and leeches to the os and vulva. Internal remedies as antifluoric in fruiture or powder, tarin, nadder, and Tringham.

Suppresio Menstruum. — In the second form of this disease characterized by an interruption of the regular periodicity of the catamemial returns, caused, independently of pregnancy and lactation. This second form of Amenorrhoea is also divided into two varieties for the purpose of description.

1. Amenorrhoea from recent and acute suppression.
2. Amenorrhoea from chronic suppression.
Here, we take it for granted that the girl has arrived at complete puberty, and the hemorhagic flux has been regularly executed for an indefinite period of time, and has been gradually suspended, or has failed to appear at the next regular period. Cause, and symptoms—The application of cold water to the lower extremities, a current of cold air at the time of menstruation, mental emotion, excessive sexual intercourse, fevers, either idiopathic or secondary. Happily for the sea many of these causes become innocuous by the habits of the patient. The bathing women can plunge themselves into cold water, during the flow of the catamenia with perfect impunity. Domestic women and female servants, who are accustomed,
the greater part of their time to work in the open air, can go through rain, dew, mud and water, even while they are menstruating, without any injurious effects. The symptoms which usually characterize acute suppression are slight feverishness, headache, nausea, hot and dry skin, pulse accelerated with pain in the back, hips, and down the thigh; neuralgic pain in the womb, and sometimes, inflammation of the womb.

Diagnosis — It is of the highest importance to distinguish inflammation from neuralgic and hysterical symptoms. In inflammation we have pain increased on pressure, quick hard pulse, thirst, hot, dry skin, tongue covered with a whitish or brown fur, with the tip and edges redder.
than usual. In nervous and neuralgic patients, the pain is not increased on pressure, the pulse more quiescent, no thirst, skin rather soft and pliable. Tongue, not much coated and moist upon the surface.

Treatment—If inflammation of any of the vital organs or wounds be connected with this disease we may take away blood freely from the arm in a full stream once or more, depending upon the strength of the patient and the severity of the attack; followed by calomel and black draught, after which resolutive, or determining remedies may be applied to the lower extremities, such as the hot mustard bath, frictions &c.

In those other conditions, the treat-
ment must be varied according to the
ir location and the severity of the at-
eh. But suppression may, and proba-
bly, more frequently comes on in delicate.
pale women, who are highly nervous and
irritable. Inflammation may even in them,
be the cause of suppression; but in most
such patients, it depends on a spas-
modic and neuralgic condition of
the abdominal muscles and womb.
The indications would be to administer
mild cathartics to regulate the condition
of the bowels, anodyne, to allay the spas-
modic condition of the muscles of the
abdomen and womb.
Should there be a leukorrhea discharge,
dependent on anemia and a weak flaccid
condition of the mucous surface of the
gential organs, treat as recommended
in retention of menses heat fore described.
Chronic Suppression.

Causes. - This may be the issue of an acute attack, or it may arise from general delicacy of health, from disease of the uterus and ovaries, or it may be the termination of the menstrual function, either before, or at the usual age. The quantity diminishes, and the time of its return becomes more irregular, until it ceases altogether.

Symptoms. - When the suppression depends merely upon the subsidence of the acute attack, we will have pain in the head, side, and breast, deficient appetite and a failure in the vital functions, ending in a confirmed deterioration of health, most favourably able to the incursion of some more serious disease peculiar to our climate. If the menses do not appear during
lactation nor some time afterwards, and the health appears to suffer without the signs of pregnancy, we may conclude there is inflammation of the cervix uteri, following delivery, ending in adhesion of that part of the organ.

Diagnosis—The most important decision here is between chronic suppression and pregnancy. A good deal of caution and precision is necessary in this state of things. If the suppression be attended with some wandering pain in the uterine region, a diminished appetite, or a perverted one, lassitude and some indigestion, and the bowels rather torpid, we may give some mild aperients and an opiate at night, together with some of the ferruginous preparations, quinine, or bark. Particularly, if the patient be feeble, pale and anemic.
If no urgent symptoms come up we will defer an opinion until the fourth or fifth month; then, an unequivocal opinion may be given, at which time the period of quickening will have arrived, and the stethoscope will reveal the true nature of the case by means of auscultation.

Treatment—Whenever the suppression is dependent upon disease of the genital system or other parts, our attention must be directed to the restoration of such parts to health, and with restoration of health in these parts, the catamenia will generally return also. But, when fluid albumin exists during the suppression, the treatment proper for uterine leucorrhea may be instituted, and the restoration of the suppressed catamenia may
be achieved. But, if this is not accomplished, then we may use the remedies recommended under the simple forms of amenorrhea in the preceding varieties. Great additional caution will be necessary with a careful estimate of the general condition of the patient, to ascertain whether or not, there be any organic disease of the womb; and for this purpose even an examination per vaginam may be instituted, to make out this important point, which being made out, will much influence the after treatment of the case.