

AN
INAUGURAL DISSERTATION

ON

The Signs of Pregnancy

SUBMITTED TO THE

PRESIDENT, BOARD OF TRUSTEES,
AND MEDICAL FACULTY

OF THE

UNIVERSITY OF NASHVILLE,

FOR THE DEGREE OF

Doctor of Medicine.

BY

W. W. J. Crockett

OF

Tennessee

1858

W. T. BERRY AND CO.

BOOKSELLERS AND STATIONERS, NASHVILLE.

To
Doctor Watson
As a mark of respect
for his
High standing as a Teacher.
And Sterling worth
As a
Practitioner of Medicine,
This
Inaugural Dissertation
is
Respectfully Dedicated
By the
Author

The Signs of Pregnancy

Immediately after effective coition of the male with the female a series of changes ensue which are of great importance to the physician; from the fact that his opinion may decide the fate of the female in a court of justice where her most important interests are entrusted to the laws of the country.

Aside from a medico-legal point of view, he is often consulted relative to deformities, and diseases which prevent natural labour, or parturition. His decision may redeem the character of the innocent, and virtuous; restore peace, happiness and reputation to the family circle. Then let it be the earnest endeavor of every

physician to acquaint himself with
rational indications resulting from a
fruitful sexual intercourse; for an
error committed under the circumstances
might not only affix a lasting stigma
upon his own reputation both
professionally and morally, but to
that of the "Chast and angelic woman"
Inexperienced as we are in the science
of Obstetrics we are not expected to
present any any signs save those
designated by our illustrious prede-
-cessors, whose abilities in many re-
-pects render them well worthy of
example; yet it is to be ardently regretted
that the sons of science in clarifying
the signs of pregnancy have fallen
into such a discrepancy of opinion
but such however is the fact;

scarcely any two coincide, and this
contrariety of opinion or statement is no
small embarrassment in the path
of the uninitiated. Therefore in a con-
sideration of the signs of pregnancy
we shall only allude briefly to those
indications which we consider to
be of most frequent occurrence and
most reliable consistently with the
functions of the organs implicated.
Subsequent to impregnation there are
changes peculiarly characteristic of its
existence. The blood is said to be
changed in quality and quantity.
The fibrin is increased while the
action of the pulse is some what
augmented. Sympathies are excited
in remote as well in contiguous
organs and the nervous system

may be affected both directly and indirectly giving rise to that irritability of mind which so often calls into requisition "the Roman weapon of defence." About this time not unfrequently the skin undergoes a change in color especially in women of the lueso-phlegmatic temperament in whom it usually becomes sallow, in spots whose dimensions vary considerably. These changes are not usually considered among the diagnostic Signs of Pregnancy. We now propose to notice some of special signs commonly particularized by Abstritions. These we propose considering under two distinct heads viz: Equivocal and Unequivocal. The former including retention

of Menstruation 2nd Morning Sickness
3rd Mammary Sympathies 4th Abdominal
Enlargement 5th Quickening 6th Uter-
ine Murmur. And the latter
1st Ballotment 2nd Palpitation of
the foetal heart which is the most
reliable sign enumerated. There are
many other signs laid down by
Authors which we think of ^{less} great
importance, and in fact only calcu-
lated to confuse the young practitioner
in arriving at a definite Conclusion,
Therefore we deem their omission
beneficial so far as practicability is
concerned: and shall rest satisfied,
if we can but only do partial justice
to the signs previously designated
Cessation of Menstruation - The non
appearance of the Catamenia at the

proper period; generally leads the female to suppose that impregnation has occurred and more especially when she has enjoyed periodical recursions. Perhaps this might be estimated as one of the most unvarying, as it is one of the first results of conception however the cessation of the catamenial discharge is not decisive, for numerous cases are recorded by high authority where the menses recurred at the regular intervals during the period of utero-gestation; and indeed, it is said by eminent physiologist that it requires the unnatural stimulus of impregnation to induce the menstrual discharge in that class of women called viragoes. "If this" says Dr Churchill "menstruation may be suppressed on

The one hand and continued on the other not withstanding Pregnancy, it is no proof of Conception" But when taken in connection or combined with other signs its validity is scarcely surpassed by any other in the category.

"Morning Sickness"—The nausea and vomiting attendant about the fifth or sixth month is confirmatory of the nervous sympathy existing between the Uterus and Stomach, and in connection with cessation of menstruation is generally considered proof of conception. But when existing alone it is certainly a sign that we cannot rely upon. The attacks of nausea and vomiting are said to occur soon after rising from a night's repose

and cease within a bout ten or twenty minutes and it is from this fact alone that Abstracians and women denominate it the "Morning Sickness".

Almost innumerable instances are on record, where the nausea and vomiting for a much longer period than above stated, and indeed, the vomiting may become so excessive as to jeopardize the life of the patient. - About the termination of the third month after conception it generally disappears, though it has in some cases accompanied the entire period of gestation. Authors have had considerable contest as to its value in diagnosing the existence of Pregnancy. Being a mere novice in the great science of Physiology, we cannot advance a theory of our own to

Explain all the various changes inci-
-dent to impregnation. However we are
quite confident that diseases may be
effectual in producing a train of sym-
-ptoms analogous to those previously
alluded to, and in cases where it is
utterly impossible for even conception
to have taken place. Dr Ramsbotham
seems to place a great estimate on
vomiting as a diagnostic sign. He says
"when vomiting is entirely absent utero-
-gestation does not proceed with its
usual regularity and activity."

Dr Churchill endorses his statement,
says that "deviations in other signs" will
occur when vomiting is absent.
Houston on the contrary denies these
statements and says "I have known women
who proceeded regularly through their

Pregnancy without experiencing the least degree of sickness." Here we have high authority in direct opposition doubtless each are incorrect according to his observation and experience.

Mammary Sympathies— Here again we notice the connection existing between remote Organs the Uterus and the Mammary gland; This change in Mamma Engaged the attention of Anatomist and Physiologist for a series of years; and it was not until after the dissections of the "immortal Lee" that those whimsical speculations were entirely abandoned.

The alteration in these glands are said to be perceptible about the eighth week after conception has taken place. The female experiences a

variety of peculiar sensations in the
organs, which as a matter of course
are difficult to describe. Authors say
they are sensations of palpation, for-
mication and tingling, I cannot
as to the accuracy of such a description
having never consulted a female
with regard these sensations however
we know there is a determination of
blood to these organs producing hard-
ness and distention. The areola for-
merly of a pinkish hue, changes its
color, and the breast gradually en-
larges in proportion to the advancement
of pregnancy. The complexion of the
individual, will modify the color
of the areola. Its circle varies in
diameters from three-fourths of an
inch to one inch, and depends in

color as the period for delivery approaches. The follicles of Morgagni secrete sufficiently to moisten the lining of the female; milk may be formed at quite an early stage, and is generally considered as very good evidence of the existence of pregnancy, but is not conclusive by any means.

The enlargement of the breast, the color of the areola and the secretion of milk when taken symptoms of pregnancy must be placed among the equivocal signs; for menstruation in some females and menorrhagia in others will produce these identical changes; and Churchill in reference to this subject says "No single sign can be relied on in diagnosing early pregnancy; and it is only

When two or three are present occurring
in proper sequence that we can
feel certain." Abdominal Enlargement

— Conception is followed by a great
change in the uterus and appendages.
There seems to be a demand for
nutritious fluid; and to supply
it the uterus takes on a peculiar
kind of congestion — its vessels
convey a vast quantity of blood,
and many which did not carry
red blood before becomes quite
visible. The arteries, veins, nerves and
lymphatics all participate in the
change and the exterior or peritoneal
coats of the uterus present a fleshy
appearance. The proper tissue of the
organ becomes more vascular and,
according to Meckel the parts

thicken from the first to the fourth month. The uterus commences its enlargement at the fundus after the reception of the ovum, and the enlargement proceeds downwards until it embraces the cervix. It is retained in the pelvis up to the fourth month; soon after however the fundus rises above the symphysis pubis and gradually ascends until it reaches the ensiform cartilage, which is attained by the expiration of the eighth month. Then it descends somewhat but still increases in magnitude. From our foregoing remarks it would appear that abdominal enlargement is positive proof of conception but we must remember that other causes

not unfrequently, give rise to an enlargement of the abdomen. In several instances cited by authors the female was of opinion herself that she was pregnant but after due investigation she was found to be the subject of disease and not impregnation. The uterus may be enormously distended by an accumulation of air, fluids, or even hydatids; the form of the abdomen in such cases being nearly or quite the same as in pregnancy. Physicians often confound this stage of pregnancy with abdominal dropsy and treat it accordingly; when after an elaps of some months the cure is spontaneous

Quackring— This term is

applied to the first perception of the fetus in utero, on the part of the mother which most usually occur about the eighteenth week after conception, it is stated by authors that these sensations may be experienced much earlier by some than others like the preceding signs, it is likely to assume many variations, and capable of causing no small amount of embarrassment to the Examiner. We have no doubt that this sign in consideration with others we have noticed, is quite sufficient to form a correct diagnosis; but when character is at stake we must not rely on this alone; nor on any one of the signs of pregnancy for if we do our anticipations will often be disappointed.

Uterine Murmur— This term has been given to a peculiar sound heard over the uterine surface. Almost every author makes his own comparison. Dr Churchill compares it to the bruit de souffle of the heart; which we think is the most appropriate. It is stated by some writers on this subject to be limited to the situation of the placenta, while others deny the statement and declare it can be heard over any part of the uterus. According to the best writers, the period when it first becomes audible is about the sixteenth week of utero-gestation. Its value as a proof of pregnancy is manifestly doubtful, since the very same sound has been heard to proceed from fibrous tumors

in the uterus, and ovaries hypertrophy
Therefore we think, the term Equivocal
is admissable; Ballotment
Having placed the patient in the
proper position the Examiner
introduces his index finger into the
vagina, and places it upon the cervix
uteri. Then by gentle fiddling the
parts above he will feel a sensation
recede and by permitting the finger
to remain motionless he will in a few
moments perceive the weight of a body
descending on the point his finger
By operating thus the fetus is forced
upward into the liquor amnii, and in
obedience to the laws of gravitation
it descends. Some Author remarks
that should this body be felt it is proof
positive of a fetus in utero; for there is

No condition or disease of this organ in which a body can be distinguished floating in the cavity. We feel assured that this is really the case. With regard to the time of practicing percussion, authors are at variance some contend that it may be performed as early as the third month while others not earlier than the fifth month. Having no experience on this subject we are at a loss to say at what time it may be practiced.

Pulsation of the foetal heart —

Not like the signs preceding this one alone is positive proof of pregnancy; and so far as we know no author has assumed a position to the contrary. The sound caused by the systole and diastole of the foetal heart are peculiar

and not likely to be mistaken for
uterine murmur or any sound
emitted by disease Dr Churchill
describes it Thus "It consists of a rapid
succession of short, regular, double,
pulsations resembling those of the
adult heart except in force and frequen-
cy." And our able and distinguished
professor of Obstetrics in the
University of Ashville - Dr Watson
has compared it to the ticking
of a watch placed under a pillow
The situation in which the
foetal heart is heard most distinctly
is said to be about the middle or
inferior abdominal region more
frequently on the left than the
right side. With this consideration
we close our remarks on the

Signs of Pregnancy not without
a feeling of regret that our task
has not been better performed.
We know that there are other
signs mentioned by authors. but
for their minor importance we do
not think they demand attention
We will now leave this all important
subject with Earnest wishes for
the full success of the Institution
which we hope soon to have the
honor to represent.