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INAUGURAL DISSERTATION

ON

The Signs of Pregnancy

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BY

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W^O
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Of
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This Dissertation,
Is Respectfully
Inscribed,

By
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The Signs of Pregnancy.

One of the most important qualifications of a physician, is the ability to determine when called upon, the existence or absence of pregnancy. It is not only an honorable means of promoting his reputation; but may be made subservient, to the best interests of his patient, which is often of even greater moment, than any considerations of mere personal advancement. The diagnosis in cases of this sort,

often not only determines the plan of treatment to be pursued, but often involves the good name of the parties concerned. It is often, the high prerogative of a physician, to wipe out the stain of baseness, from the name of innocence, and turn aside the cruel and poisoned shafts, that slander aims at the heart of virtue. And on the other hand, it may become his painful duty, to pronounce the fatal decision, which rends the tenderest feelings of the human heart, and drives a helpless female, from a father's protecting roof, wretched as she wanders through a heartless world, even by a mother's benediction. How important then, that we be prepared to give a correct opinion, when

when called upon, whether with the view of establishing the guilt or innocence of a patient; or of determining, what course of treatment shall be adopted.

There are many difficulties to be overcome, in the attainment of this object, but the importance of the subject demands, that they shall be met and surmounted, as far as the present state of Science will enable us to do so. It can be accomplished, only, by a careful study of all the phenomena of pregnancy, in their mutual relations, and the protean shapes, that these phenomena may put on. The careful investigation of these signs, is the more necessary, since they all, with a single

exception, speak in more or less equivocal language. Every sign of early pregnancy, being frequently present in other and very different conditions.

As soon as impregnation takes place, it is announced, - though as already observed, not in unmistakable terms, - by the rapid supercession of a great number of sympathetic affections, resulting from the new and exalted physiological action, going on in the uterus or ovaries, amongst these, are increased irritability of the nervous system, evinced by erratic pains in the head, face, and teeth, and in capriciousness of temper; increased activity of the circulation, and very marked exi-

lation of the exhalents. The menstrual discharge ceases, and there is pain in the region of the ovaries. A decided change takes place in the features and expression of the face. There is an extensive train of sympathies excited in other and distant organs, affecting, either their structure or functions. The mammae are increased in size, and tingling pains are felt in them; the areola is formed, and milk secreted. The stomach becomes irritable and vomiting ensues; the appetite is capricious, and the salivary glands participating in the general irritability, takes an increased activity of function. The uterus undergoes great

alteration, Increasing in size daily, its fundus soon mounts \approx above the pubes, enlarging the abdomen, and causing a very marked change, in the umbilicus. In the mean while, certain changes are occurring in the os and Cervix Uteri.

The foetus, under a steady process of development, after awhile begins to manifest its power of motion, — at the period of quickening; and at a later stage of gestation the pulsations of its heart, may be heard, upon the application of the stethoscope. Having made a brief summary of the chief phenomena of gestation, I will proceed to notice them more in detail.

ist. Pain in the ovaries, is one of the earliest appreciable evidence, that impregnation has taken place; and is caused by the swelling and bursting, of the Graafian vesicle. But as this may be produced by other causes, and is frequently so produced, taken singly, it cannot be regarded as a very valuable indication.

ii^d. Salivation is another early sign, and one upon which many eminent men place considerable reliance; but it should be remembered that it may be produced by causes entirely disconnected with pregnancy. It usually persists through the whole period of gestation, and is sometimes so profuse, as to be a source of great annoyance; but at other times it is so slight as to produce,

but little inconvenience.

iii.rd Nausea and vomiting, usually supervene soon after conception; and although it cannot be regarded, as a positive sign, that impregnation has taken place, it is still, a sign of the highest importance when found to coincide with others. It is easily distinguished from vomiting produced by other causes, by its being commonly confined to the morning, during meals, or immediately after them, and the entire absence of any other symptoms of disease.

iv.th Constipation, is an attendant of pregnancy, and is the result of the gravid uterus, pressing upon the rectum, and producing a partial paralysis of

its muscular fibres; at the same time, that it offers a mechanical obstruction to the passage of the faeces.

v.th. Vesical irritation. is usually present during pregnancy, and is produced in the early months, by the pressure of the uterus against the neck of the bladder; and in more advanced pregnancy, by the ascent of the womb, putting the utero cystic connection upon the stretch, and thus producing displacement and irritation of the bladder.

vi.th. The expression of the features, undergo marked changes, during pregnancy. The face assumes a pinched and elongated appearance; the mouth appears broader, and the eyes

sunken, languid, and surrounded by
a dark brown, or livid hue.

vii.th Certain moral changes and perversions of taste, are frequently produced by pregnancy. Those who are habitually amiable and even tempered, become irascible and capricious; whilst those of an opposite disposition, often grow mild and amiable. Some females in ordinary pregnancy, experience the most tormenting desire, for disgusting articles of food; others will loathe those of which, they were particularly fond, before they became enceinte.

viii.th Females themselves attach more importance, to the suppression of the menstrual discharge, as a sign of impregnation, than to all the

others together; and it is in fact, the most reliable of all the rational signs. If it occur in a woman who has previously menstruated regularly, and there should be no decline of her health beyond the third month, and at that time, an improvement of her general health take place, it would be strong presumptive evidence, of her having conceived. For if the suppression does not depend upon impregnation, instead of any improvement in her health about the third month, it will continue impaired, and most probably grow worse. If other signs be present at the same time, we may feel certain that she is pregnant.

ixth. During gestation, marked changes

take place in the mammae, but the period at which they occur, is variable and uncertain. Sometimes they supervene soon after conception, and then again, not until pregnancy is far advanced. As a general rule however, by the end of the second month, the woman will feel uneasy throbbing sensations in the mammae, with tingling pains in the nipples, and center of the glands. They become fuller and firmer, and modulated. The permanency of this enlargement, together with its firm knotty feel, will enable us ordinarily to distinguish it, from enlargement produced by other causes.

8th. The changes which take place

in the areola, are regarded by many, as the most certain external indication of pregnancy. During the third and fourth months, it undergoes rapid changes, assuming a dark hue, and if the woman be dark complexioned, nearly black; and at the same time it becomes soft and moist. It varies from an inch to an inch and a half in diameter. The nipple becomes turgid and prominent, and partakes of the colour of the areola. Around its base, may be seen, the glandular follicles, projecting from the one sixteenth, to an eighth of an inch. Dr Govek believed, that the dark hue of the areola, rarely depended upon any other cause than pregnancy.

= cy; and William Hunter, deemed it
a more reliable sign of pregnancy
- cy, than he did the presence of
the hymen of virginity.

xv.th The secretion of milk, is popularly
regarded as an infallible sign, that
the woman either is, or has recently
been pregnant; but many facts com-
bine, to establish beyond all controversy,
that it may take place, independent
of gestation; or even of sexual intercourse.
Instances have occurred in which mi-
lk, was secreted both before puberty,
and after the cessation of the menses;
and even men, have been known to give
milk. Nevertheless - if found in connec-
tion with other signs, it is entitled to a
great deal of weight in the making up

of our opinion. ~~and another way, when~~
55th Quickenings. Between the fourth and
fifth months of pregnancy, the female
usually experiences certain sensations, pro-
duced by the foetus in utero. This, like the
signs already treated of, is by no means
an infallible one; for women frequent-
ly fancy that they feel the motions of
a child, when they are not pregnant;
and on the other hand the whole per-
iod of utero gestation, may be passed,
without the foetus ever imparting these
sensations to the mother. Nor can
we rely with any more certainty, on
the sensations communicated to the
hand, when laid upon the abdomen;
for it has happened to more than
one physician, to suppose that he felt

the motions of a foetus in this way, when in fact there was none in the uterus.

811th. When the womb becomes gravid, it of course increases greatly in size and weight, and its own increased gravity and the pressure of the superincumbent viscera, causes it to descend lower into the pelvis, causing the abdomen to appear flatter than natural; provided an inflated state of the bowels should not exist. But by the third month the belly is perceptibly enlarged, and from this period, its enlargement keeps pace with the development of the uterus.

In the fifth month, the abdominal walls being put on the stretch, the depression in the umbilicus begins to diminish, and by the end of the

sixth month, it is wholly obliterated, and soon becomes elevated above the surrounding surface; but as these changes may be produced by other causes, it would not be safe to base an opinion on them alone.

sixth. The uterus undergoes great and important changes during gestation.

Immediately after conception it begins to increase in size, the fundus being first developed, then the body, and lastly the cervix, which is not much expanded before the sixth month.

About the end of the fourth month, the fundus rises above the anterior wall of the pelvis; during the fifth month it ascends midway between the symphysis pubis and the umbilicus;

and during the sixth, reaches the umbilicus. In the seventh month, it attains to midway between the umbilicus and sternum; and by the end of the eighth month, it has risen to the ensiform cartilage, filling the whole abdomen, and rendering it tense and prominent. It continues to enlarge during the ninth month, but there is an arrest of its upward tendency; and about two weeks before the close of gestation, there is a subsidence of it; so much so, that the woman looks decidedly smaller.

XVth. The os and cervix uteri, undergo also, certain changes during the different stages of pregnancy. As soon as conception occurs, a greater sus-

ply of fluid is sent to them, their vessels become enlarged and filled with blood, the cellular texture is loosened out, and its misterices infiltrated; and on examination the cervix will be found more full, round, soft and elastic. The margins of the os, will feel more tumid and soft, and less distinct, being enlarged and circular. During the sixth month the cervix begins to shorten, and continues to do so, till the neck is finally lost in the body; the head of the child brought in contact with the os, and labour sets in. If we examine the os at the end of the fourth month, it will be found very soft and relaxed, and looking slightly backwards; and within the orifice we may feel

distinctly, the glandulae Nabothii; feeling like little smooth vesicles rolling under the point of the finger. we can also introduce our finger to a considerable depth, into the cavity of the cervix.

From this period the os rises rapidly in the pelvis, in consequence of the expansion of the neck, and is directed still more backward, in consequence of the anterior obliquity of the fundus, and body of the uterus. If it be examined in the last stages of pregnancy, it will convey the impression of an opening in a nearly flat surface; or a mere rugous orifice, in the mucous membrane of the upper part of the vagina. These changes however, may be produced

by other causes than pregnancy, and therefore should not be relied upon, in the absence of other signs.

885th Ballottement, is performed by passing one or two fingers up the vagina of the patient, whilst she is standing or reclining with her shoulders considerably elevated, and bringing them in contact with the anterior superior portion of the uterine neck. The other hand is to be laid upon the abdomen, so as to press the uterus down into the pelvis. A quick jerking impression, is then to be made upon the uterus, upwards, by the fingers in contact with its cervix. The sensation of something bounding away from the fingers

will be felt, and in the course of a few seconds it will return with a gentle tap upon the fingers. If this be distinctly felt, it is positive proof of the presence of a foetus in utero; but is not available at all stages of pregnancy; - and besides there are some sources of error, connected with its practice. It cannot be resorted to with any degree of satisfaction, before the fourth month, nor after the sixth. Previous to the fourth month the foetus has not sufficient weight to give the impression, and the neck of the womb is not sufficiently expanded to allow its proper descent upon the fingers. In the more advanced stages, the foetus too nearly fills up the cavity

88ii.

of the uterus, to admit of the requisite movements in the Liquor amni; and besides, there are other and more easy modes, of diagnosis in this stage of pregnancy, which renders this one of but little value.

88ii.th after the fifth month, has been completed, and in some instances a week or two before, the Stethoscope affords, an invaluable sign of pregnancy, viz; The double pulsation of the foetal heart. The point of the mother's abdomen at which this sound is heard, is not constant, particularly, from the sixth to the eighth month; as the foetus is liable at this stage of pregnancy, more than any other, to change its position. It will be most frequently

heard, however, midway a line drawn from the umbilicus, to the anterior inferior spinous process of the ilium, and often to the left side of the abdomen, than the right side. The pulsations of the foetal heart, can be readily distinguished from those of the maternal vessels, by their greater frequency, being from one hundred and twenty, to one hundred and forty in the minute; whilst the mother's, will not perhaps, exceed seventy five or eighty beats within the same time. It is sometimes necessary to press upon the stethoscope, in order to bring the walls of the foetal thorax, in close apposition with those of the uterus; or the uterus against the abdominal parietes of the mother;

as the intervention of the Liquor amni in the uterus, or gas within the mother's abdomen, will prevent the proper transmission, of the sound to the ear.

The pulsations are very delicate, and are said to resemble the ticking of a watch, at night, through one's pillow. It is, when fully made out, a positive evidence of pregnancy, and of the foetus being alive.

Its absence however, or our being unable to detect it, is not by any means, positive evidence, or proof, of the absence of a foetus in utero.
