

AN
INAUGURAL DISSERTATION
ON

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.

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OF

Alabama

1858.9

MEDICAL JOURNAL OFFICE,
NASHVILLE.

Signs of Pregnancy

It sometimes becomes a matter of the gravest importance to determine in a given case whether pregnancy does, or does not exist; and occasionally consequences vital to the interest of the patient hang upon our decision. We may be appealed to by injured innocence to avert the fatal shafts of calumny, or guilt may seek our aid to hide from public view her secret enormities, and as the safest way to accomplish her object, endeavor to impose upon us the belief that she is slandered. An unmarried woman of previous good character, for example, is suspected of being pregnant, and the vindication of her chastity requires the

verdict of a medical man that she is
 not, and we are called upon to decide
 the question. If we pronounce her pregnant
 when in truth she is not, who does not see
 the stupendous injury we inflict upon her?
 Robbed of her character for chastity, in
 all civilized countries woman falls from
 the high sphere in which she was designed
 to move into the very depths of degradation
 and disgrace. Whether just or unjust, the
 conventional law of society against uncha-
 stity in the female, whilst it scarcely more
 than condemns the same crime in the other
 sex is, rigid and inexorable to the last
 degree. Hence the absolute necessity in such
 cases that we be positively certain of the truth
 truth of our diagnosis before we venture to
 pronounce the woman pregnant.

On the other hand should we pronounce
 her not pregnant when in truth she is,

we may not only shield crime from its merited retribution, but encourage the perpetration of the still more flagitious crime of intentional abortion or infanticide

But this is not the only light in which the subject under consideration is an important one. In many countries pregnancy is very justly considered a cause why the execution of capital punishment should be delayed; and our opinion might be required in a case of that character.

And again the disposition of property may depend ^{upon} whether a woman be pregnant or not. These cases are difficult and perplexing to the last degree, for many of the signs of pregnancy are of such a character that we cannot arrive at a knowledge of their presence or absence, except through the patient's representations, and if she have any motive to deceive, of course her

statements must be received with extreme caution. But not only is the subject an important one in a medico-legal point of view, but in the treatment of disease the presence or absence of pregnancy will have an important bearing on the measures we adopt. What might be very proper and necessary in an unimpregnated woman, might be very improper and dangerous in one who is pregnant. Cases of this character will very readily suggest themselves to the mind of the intelligent reader, and I need not therefore enlarge upon this part of my subject, and without further circumlocution I will proceed directly to the consideration of my subject proper, and as the ordinary limits of a thesis will not allow me to discuss it fully, I shall only mention the more important signs, referring the reader to systematic books

for fuller details of the subject.

Suppression of the menses If the patient has no motive to conceal her pregnancy, the suppression of the menses may be regarded as an important sign. But if she has, it will be as difficult to ascertain whether she still menstruates or not, as to determine the existence or non-existence of pregnancy itself; since we have to rely solely on her statements. If however she professes to laboring under amenorrhoea and there be no visible signs of ill health, the symptom is of sufficient value to raise in our minds a suspicion of pregnancy, although it is insufficient per se, even when certainly ascertained, to form grounds for a positive diagnosis, as will plainly appear from the three following facts. (a) Women have continued to menstruate through the whole term of pregnancy. (b) Women have borne

Children who never did menstruate. c)
amenorrhoea may result from many causes
totally unconnected with pregnancy, Hence
it is necessary that we consider this sign
in connection with others in order to
derive its full value. In ~~a~~ the case of
married women the suppression of the
menses if not followed by any sign of
ill health, may be looked upon as a
pretty certain sign of pregnancy.

We must not forget however that there
are probably but one or two infallible
signs (to be mentioned hereafter) of the
presence of a fetus in utero, and when
reputation or property is at stake be very
guarded in our diagnosis.

It sometimes happens that the menses are
retained behind a strictured or adherent
condition of the vaginal walls or by an
imperforated hymen, and their accumula-

tion in the uterus may give rise to most of the symptoms of pregnancy, and thus subject the patient to unjust suspicion. Such cases are by no means uncommon.

There are other sources of fallacy in connection with this symptom. Girls have been known to stain their linen at the return of the regular menstrual period in order to keep down suspicions of pregnancy. Such deceptions could hardly be kept up through the whole period of pregnancy and through the process of delivery without detection, unless the patient was assisted by her friends. Remembering these and other sources of fallacy the sign under consideration is one of much value.

Nausea and Vomiting.

The stomach is pretty generally involved in the wide range of sympathies awakened in the system by the change going on

in the uterus, and hence we have nausea and vomiting during pregnancy.

It may commence at the very moment of conception, but is most generally deferred for two or three weeks, or perhaps as many months. In some persons it does not occur at all. But nausea and vomiting may result from causes totally unconnected with pregnancy, and it would therefore be very rash to conclude from this sign alone that the woman is pregnant. We may generally be able by an attentive examination to distinguish between the nausea and vomiting produced by pregnancy and that which is the result of other causes. In pregnancy this symptom is not usually connected with any other sign of ill health; whereas if it depends upon some other cause a careful investigation will detect it. When it depends upon pregnancy

it is very apt to come on in the morning, and is hence called Morning sickness; this is however not always the case.

The nausea generally comes on suddenly, perhaps while the woman is eating, and she scarcely has time to retire before the contents of the stomach is ejected, and then she feels as well as ever. Sometimes this symptom becomes so distressing that the patient is unable to retain any thing on the stomach long enough to derive proper nourishment, and may be threatened with death from inanition. This however is rare. This like the symptom just considered is alone inconclusive and only adds to the probabilities of the existence of pregnancy.

Salivation.

The sympathy which excites nausea and vomiting sometimes extends

to the salivary glands and produces profuse salivation. This symptom has been noticed since the days of Hippocrates and is known among the common people of this country as "Spitting Cotton". It does not occur with sufficient certainty to make it a very valuable sign, but when it does occur, if it cannot otherwise be accounted for it may be regarded as adding considerably to the probabilities of the existence of pregnancy.

Changes in the Mammæ

Soon after conception the woman begins to be sensible of certain changes going on in the breasts. She experiences some pain and a stretching fullness commencing about the nipple, at the same time the breasts begin to grow in size and become fuller and harder, the circle around the nipple changes in color and

other characters constituting what is termed the areola. As gestation advances milk begins to be secreted; There is considerable difference as to the period at which these changes occur. In some coming on soon after conception and in others being deferred till the end of gestation.

We may however expect pretty uniformly to find the greater number of them present at the end of the second or the beginning of the third month.

It ^{must} not be forgotten that these changes may occur from causes unconnected with pregnancy, except perhaps the areola.

The breasts sometimes enlarge simply from cohabitation, or it may be caused by the retention of the menses within the uterus, or by any other cause capable of distending the womb.

Of all the signs afforded by the breasts

competent judges assert the areola to be the most reliable, and many eminent men have held it to be infalible.

What are the changes of the true areola?

At the risk of being tedious we will answer the question by an extract from an eminent author. ^{Let} The color at the period of two months is little more than a deep shade of rose or flesh color slightly tinged with a yellowish or brownish hue.

During the period of the next two months all the changes are perfected or nearly so, and it then presents the following characters; a circle around the nipple, whose color varies in intensity according to the peculiar complexion of the individual, being generally much darker in persons with black hair and dark eyes, than in those of fair hair, light colored eyes and delicate complexions. This circle varies

in extent from a diameter of an inch, to an inch and a half and increases in some as pregnancy advances, as does also the depth of the color, in the center of the circle the nipple is observed partaking of the altered color of the part, and appearing turgid and prominent, and that part of the areola immediately around the base of the nipple has its surface rendered unequal by the prominence of the glandular follicles, which varying in number from twelve to twenty, project from one sixteenth to an eighth of an inch; and lastly the integument covering the parts is observed to be soft and more moist than that which surrounds it, and at the same time the breasts are observed to be full and firm at least more so than was natural to the person previously.²² According to Hunter Montgomery

and others if all these characters exist in the areola they are all most a certain sign of pregnancy but probably any one of them and especially the one most generally relied on viz color may be wanting and still the woman prove pregnant. It must also be remembered that the breasts of a woman recently delivered will present characters scarcely distinguishable from those of one during pregnancy and furthermore this state of the areola is kept up to a considerable degree during the nursing period. We might greatly extend our remarks upon this part of the subject but our limits admonish us to desist

Secretion of Milk

The presence of milk in the breast is properly considered a conclusive sign of pregnancy but

nothing could be more erroneous since it has often occurred under circumstances that preclude the possibility of the existence of that condition. It has occurred in children of eight years of age and often the decline of life from the application of children to the breasts. Dr. Dunglison mentions a case of a negro man who suckled the children of his mistress. It sometimes happens that women continue to secrete milk for a considerable time after weaning their children and the records of medicine furnish one case in which this continued fourteen years. It may depend also upon morbid changes going on in the womb especially such as tend to distend it as physometra polypus &c. Nevertheless when found to exist with other signs especially if the woman has

never been pregnant before it will go a great way in establishing the existence of pregnancy

Quickening

It is popularly supposed that the foetus is first endowed with life at the moment when the mother first feels its movements in the uterus and it is strange that in many civilized countries the law should sanction ^{such an} absurd notion. Quickening usually begins about the end of the third or the beginning of the fourth month sometimes later and sometimes earlier. When it does occur and especially if at the same time the womb suddenly rise out of the pelvic cavity the woman usually experiences a considerable degree of nervousness which may end in faintness or even complete syncope after which

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she feels a slight fluttering sensation which goes on to increase till she distinctly feels the motion of the foetus.

The motions of the foetus are not only perceptible to the mother but may usually be felt by the physician on placing his hand on the abdomen especially if the hand be first dipped in water. This sign like the preceding is not infallible. Women often think they feel the motion of the child when they are not pregnant.

It is said moreover that some women by the action of the abdominal muscles can so closely simulate the movements of the foetus as to "deceive the very elect." For these reasons this cannot be regarded as a positive sign of pregnancy.

Enlargement of the Womb

Since enlargement of the abdomen may arise from various causes other than pregnancy of course its presence unsupported by other circumstances of that condition is not entitled to a great deal of weight. It may be the result of morbid processes going on in the uterine cavity. ovaries or other viscera or it may be the effects of abdominal dropsy. We may be assisted in placing a proper estimate upon this symptom by the length of time it has existed the patients general health, the feel of the uterine tumor &c &c

During the first two months of pregnancy there is no perceptible enlargement of the abdomen although the uterus is enlarged but being still a pelvic organ it does not encroach up in the abdominal space. But towards the

end of the third month enlargement begins to be seen and continues to keep pace with pregnancy till towards the close of pregnancy. During the fifth month the depressed condition of the navel begins to diminish until it comes to a level with the surrounding surface and finally in most persons protrudes beyond it.

If the enlargement proceeds from a gravid uterus and a woman be four months or more advanced by placing her in the proper position the outlines of the womb may generally be felt through the abdominal walls and if upon vaginal inquiry we find the cervix and os uteri undergoing the changes incident to pregnancy and the woman's character and her general health do not contradict the

fact, we may safely pronounce her pregnant. If the swelling depends upon some morbid process we will be admonished of the fact by the general history of the case the length of time the growth has existed and the health of the patient. Much more might be said upon this part of the subject but our limits forbid us to extend our remarks.

Balottement

This mode of inquiry is to be instituted in the following manner, one or two fingers are to be introduced into the vagina and carried up until they come in contact with the anterior aspect of the cervix uteri and as high up as the finger can be made to reach and kept in that position while the other hand is prest upon the uterine tumour in a direction towards

the cervix. At the instant of doing this the finger must be quickly impressed against the neck of the womb and still remain in contact with it and a sensation will be felt as of something bounding away which in a moment will return with a gentle pat. This is best performed while the patient is in the upright position or with her shoulders very much elevated. This sign is only valuable from the end of the fourth to the end of the sixth month. Before that time the foetus is too light to be thus detected and after and after that time its increase of size will not admit of its thus floating about. When present it is decisive of the existence of pregnancy and is as applicable to a dead foetus as to a living one.

Sounds of the Foetal Heart

After the fifth month of pregnancy by applying the ear or stethoscope to the abdomen of the mother we may be able to discover the sounds of the foetal heart. beating at the rate of from 140 to 160 beats a minute being much more rapid than the pulse of the mother and thereby distinguished from the pulsations of her abdominal arteries. It is most generally compared to the ticking of a watch under ones pillow. It is very quick when first discoverable but grows more slow and stronger as pregnancy advances. When once heard of course it dispels all doubts as to the existence of pregnancy. Its value however is much depreciated by the fact that we cannot avail ourselves of it in that stage of pregnancy most obscure by doubts

and we cannot always detect it even in the latter months and of course is worthless if the child be dead. It is usually most distinctly heard at a point midway between the umbilicus and the anterior inferior spinous process of the ilium and most frequently on the left side.

Placental Souffle as it is usually termed is dwelt upon by all modern writers on the subject. The mode of its production seems to be an unsettled question some referring it to the motion of the blood in the placenta while others make its site in the uterine sinuses whilst another class contend that it is produced by the pressure of the gravid uterus upon the illiac arteries of the mother.

Whatever be its source it is clear from the statements of all that it may be so closely simulated by pressure, of any

kind on a large artery as not to be distinguishable from it, and hence, it is of very little value I may therefore be allowed to dismiss it without further consideration

Having in as concise and clear a manner as I am capable of, touched upon the most important points of my subject I will remark by way of closing that my greatest difficulty in this essay has been not to find matter for it but to make a judicious selection of such facts as are most important. If it shall be found that I have chosen of trivial moments and passed by others of more importance, I trust my inexperience will furnish a sufficient excuse for my neglect,

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