

AN
INAUGURAL DISSERTATION
ON
Abortion

SUBMITTED TO THE
PRESIDENT, BOARD OF TRUSTEES, AND MEDICAL FACULTY
OF THE

UNIVERSITY OF NASHVILLE,
FOR THE DEGREE OF
DOCTOR OF MEDICINE.

BY

Benjamin R. Harris
OF
Tennessee

185

W. T. BERRY & CO,
BOOKSELLERS AND STATIONERS,
NASHVILLE, TENN.

To
The Faculty
of
The Medical Department
of
The University of Nashville
This Thesis

Is Respectfully Inscribed
By

B. R. H.

Abortion.

Abortion is a term used to express the expulsion of a fetus from the cavity of the uterus before it is capable of sustaining an independent existence: it is distinguished from premature labor by its always taking place before the seventh month of pregnancy. Miscarriage, by some writers, is used synonymously with abortion, both being made to express an expulsion of the fetus before the seventh month; while by others it is made to refer only to the expulsion taking place between the period of conception and the sixth week.

It sometimes happens, though not often, that the fetus is brought forth viable before the seventh month; when this is the case it is no longer called abortion, but premature labor. Abortion may occur at any time from the period of conception to the seventh month, though it appears to be more easily excited at, or previous to the third month, owing to a frailty of the connection between the ovum and the decidua. It is also more liable to occur at the commencement of each menstrual return than in the interval, owing to the increased excitement of the gestative

organs at that time. Abortion admits of two classifications according to the ~~time~~ at which it occurs. First, ovular if it take place during the first month of conception. Second Embryonic, if after the first and before the seventh month. In ovular abortion the pains very much resemble those of difficult menstruation, and they are accompanied with a considerable discharge of clotted, or coagulated blood. The tunica decidua passes away alone, also, having some resemblance to that imperfect form which is produced in some cases of difficult menstruation, but exhibiting

a more completely membranous structure. And here the Ovum may be decomposed and escape unperceived, at some subsequent period, and therefore it is incapable of being traced. Embryonic abortion may be divided into two parts, or stages. The separation of the Ovum from the uterus and its expulsion from the mouth. Sometimes these take place very nearly simultaneously, but at other times several days, or even weeks intervene. So the process of abortion may vary considerably in its duration and become exceedingly tedious. When the fetus remains undischarged

from the uterus for several days, or even weeks after its detachment and consequently after its death. There is, through the whole of this period, an occasional discharge from the vagina and often temporary disquietudes and contractile pains in the uterus. But both are of a very different kind from those which occur antecedently to the separation of the ovum. The first are usually sharp and expulsive, with a free discharge of clotted arterial blood; sometimes in an alarming though rarely dangerous profusion; The second are dull and heavy and the discharge is smaller in quantity, dark and fetid.

Sometimes the whole contents of the uterus are expelled at once, but more generally they are discharged in detached parts, the fetus first escaping with the liquor amnii, the placenta following some hours, or even days afterward.

Causes. The causes of abortion are very numerous and some of them are rather conjectured than fully ascertained. They may depend upon the ovum itself, upon the uterus itself, or upon the uterus as affected by the nature of the maternal constitution, or accidental lesion. Some of the causes of abortion are of a constitutional, or accidental kind and are very obvious.

They may be internal and depend upon a relaxed, or debilitated state of the system, generally, and consequently of the uterus as a part of it. It may be caused by a constitutional cachexia; such as Scrofula and Syphilis.

These diseases destroy the life of the fetus and when dead it acts as a foreign substance, exciting the uterus to expulsive efforts, and is thus generally discharged, though not always; for examples have occurred in which the fetus has died before the termination of the third month, yet the membranes being healthy it has increased to a certain size and remained until the expiration

of the ninth month and then
was expelled, according to the genius
and constitution of the womb.

Inflammatory ulceration of the
neck of the uterus may cause
abortion. It acts so as to modify
the vitality of the uterus, in the
early stage of gestation, that the
fetal germ dies. A degenerated
condition of the placenta may
cause it, the placenta being the me-
dium through which the fetus
receives its sustenance. Febrile dis-
eases, inflammation of the intesti-
nal canal, violent and continued
pressure over the uterine region,
such as prevents the uterus from
duly expanding and a sudden shock

Such as a fall, or blow on the abdomen, are all causes of abortion.

So also is violent exertion of every kind a cause; as immoderate dancing, riding, or even walking, lifting heavy weights, great straining to evacuate the faeces, or too frequent evacuations from a powerful purgative. Violent excitement of the passions, as terror, anxiety, sorrow, or joy: violent excitement of the senses by objects of disgust whether of sight, sound, taste, or even smell, or whatever else tends to disturb, or check the circulation suddenly and thereby produce fainting, will often prove a cause of abortions.

Another and very frequent cause is plethora. The uterus, being a large vascular organ, is obedient to the laws of vascular action. The fetal portion of the placenta being feebly attached if therefore more blood be sent to the maternal part of the placenta than it can easily receive, circulate and act under, a separation will take place and an extravasation will issue. There is what may be denominated an atonic plethora, or that commonly existing in high and fashionable life, among those who take little exercise, live luxuriously and sleep in soft,

warm beds. although the action accompanying the pressure is feeble, compared with what occurs in the opposite state, the vessels themselves are feeble also and their mouths and tunics are exceedingly apt to give way to even a slight impetus and hence plethora becomes a frequent cause of abortion in women of a delicate habit and unrestrained indulgence.

Prognosis. In the majority of cases abortion is not serious, or dangerous to the life of the woman, but not always; for in cases of long protraction she may die from the effects of hemorrhage. Abortion may be followed by

hysteritis, inflammation of the uterine veins, and some of the other inflammatory diseases of child bed.

Symptoms. The symptoms of abortion may be arranged under two heads, those which precede and forebode the occurrence, and those which accompany abortion and indicate that the process has already commenced. The first kind consists in a sudden loss of those sympathetic feelings which most women, more or less, experience during pregnancy, such as morning sickness and others consequent on that state. The second kind are similar to the first

Symptoms of labor, and the chief are the accession of periodical uterine pains and the appearance of a sanguineous discharge.

The pains recur at first, at long intervals, and are but slight, but as the process goes on, they become more frequent and expulsive in their character. They are at first referred to the lower part of the abdomen, back, and loins. Shooting occasionally down the inside of the thighs. The discharge of blood at the commencement, is generally very trifling, but increases as the contraction of the uterus becomes more frequent and powerful.

Treatment. The general

Treatment of abortion consists
First, in preventing it when
it threatens; and secondly in safe-
ly conducting the patient through
it when it is evident that
it will take place. The first may
be denominated the conservative
and the latter the palliative treat-
ment. The circumstances in
which the conservative treatment
may be used, are the following,
slight hemorrhage, irregular labor
pains, and evidence that the fetus
is living, if there be doubt, how-
ever, an examination should be
made, per vaginum, and if the
uterus be found undistended
and normal, it will be an evidence

that it has not taken place.
But, on the other hand, if the
gas be found flatulous and soft
this will be conclusive evidence
that abortion is about to take
place. The first step to be taken
is to enjoin quietude on the patient.
She should be kept in a recum-
bent position. If there be symp-
toms of plethora, or oppression,
caused by an accident, sudden emo-
tion of the mind, or severe exercise,
by disturbing the equilibrium of
the circulatory system; blood should
be immediately taken from the
arm and all irritation should be
removed from the bowels by a
gentle laxative, or injection.

In every instance where plethora prevails, after abstracting blood the best remedy is a full dose of Opium, which may be used in any of its forms, solid, or in tincture, a dose in this disease is from two to four grains of the solid and from forty to sixty drops of the tincture. The patient is to be brought and kept under the influence of it for three, or four days. If there be hemorrhage sugar of lead in three grain doses with a fourth of a grain of Opium may be given every three, or four hours. It however is objectionable on account of its nauseating effect. Tannin may be given in

Ten grains doses, every two, or three hours. Gallic acid in two, or three grain doses may be given every two, or three hours. Cold applications to the hypogastric region should never be omitted, except there be some peculiarity in the patient that forbids. They should not be used to too great an excess, only to produce coldness. They then should be suspended and warm applications used.

Palliative treatment. This, as has been stated, is to conduct the patient safely through when abortion will take place. Imitabdetosis also necessary in this treatment light diet &c. Opium

is not admissible but pernicious because it prolongs the process of abortion, which when decided to take place the sooner the better.

The hemorrhage should be controlled, in such a manner, that the patient may get through the process with as little loss of blood as possible. For this purpose tannin and other astringents that will not modify the expulsive efforts of the uterus may be taken inwardly.

Vaginal injections are objectionable because they wash away the coagula from around the bleeding orifices which should be encouraged. The tampon, or a plug of some substance, as finely pre-

pared sponge, a silk handkerchief,
or sufficient quantity of raw
cotton, freed from all foreign
substances, made to fill up the
vagina, completely, and confined
there with a compress and T
bandage, is the most effectual
method we have for arresting uterine
hemorrhage in abortion, and
it never fails when rightly ap-
plied. It answers another purpose
also, which is to excite the uterus
to contractions. Ergot should be
given in small doses regularly
to excite the uterus if the mem-
branes be ruptured and a retention
of the afterbirth in these cases
the tampon and ergot are the

main reliances. Every time flor-
ing takes place an examination, per
magnum, should be made and
if the afterbirth be found de-
tached, it must be removed by
means of the finger.