NOBLE (C.P.)

Remarks on the treatment of inevitable abortion.

Reprinted from CODEX MEDICUS PHILADELPHIÆ,
October, 1894.

REMARKS ON THE TREATMENT OF INEVITABLE ABORTION.

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IN this paper we shall confine our remarks to a brief discussion of abortion and the treatment of inevitable abortion. From the practical standpoint cases are best divided into four classes. 1. Abortion from natural causes. 2. Criminal abortion. 3. Abortion before the end of the third month. 4. Abortion during and after the fourth month.

The dangers attending spontaneous abortion are far less than those of criminal abortion. That this is a fact is borne out by universal experience, and the reasons therefor are quite apparent. When abortion occurs without criminal interference it is because of detachment of the ovum from the womb. This may occur suddenly from a fall or a blow, or gradually, as the result of morbid changes in the decidua or endometrium, leading to atrophy. In either case, the escape of the ovum is facilitated. Moreover, the sac of the ovum is not ruptured, and finally, and most inportant of all, no foreign body carrying the septic germs has been introduced into the cavity of the womb. That is to say, in non-criminal abortion the process begins with a non-infected uterine cavity. The only exception to this rule is when abortion is due to acute endometritis, frequently of gonorrhœal origin. Therefore, in a broad way it can be stated that in spontaneous abortion the process is likely to be completed without sepsis; and the ovum is likely to be expelled entire.

In criminal abortion almost always some foreign body is introduced into the cavity of the womb. This may cause serious traumatism of the organ, may rupture the ovum and may introduce septic germs into the uterine cavity. As a matter of fact, all these consequences frequently ensue. Criminal abortion is performed almost always by the pregnant woman herself, by a mid-wife, or by an ignorant doctor—conditions which favor ill results, owing to the lack of technical knowledge. Criminal abortion is almost invariably done when the pregnancy is normal and the attachment of the ovum firm. Hence, as a rule, the conditions for the expulsion of the ovum are unfavorable, the ovum is ruptured and it is firmly attached.

Abortion occuring before the end of the third month is less dangerous than subsequent to that period. Prior to the end of the third month the ovum is usually thrown off entire except in criminal cases. This result is facilitated by the smaller size of the ovum and by the relatively slight attachment of the chorion, as compared with that of the placenta in later months.

Likewise, the vascular connections of the ovum with the womb are less developed, so that the likelihood of free hemorrhage is not so great. Moreover, the presence of the entire ovum tends to lessen hemorrhage by playing the role of the tampon.

These general considerations have a direct bearing upon the proper treatment of inevitable abortion.

The chief dangers to be feared from abortion are sepsis and hemorrhage, and the problem in treatment is to prevent the one and avoid the other. In case one or both are present, when the case comes under observation, the problem is varied.

The first aim of the practitioner should be to prevent infection. To do this, it is essential that his hands and instruments be disinfected, and that the same should be done with the patient's vagina and external genitals, before any examination or other interference is attempted. This practice is the basis of all successful treatment, and its neglect the cause of most of the deaths from abortion.

Both sepsis and hemorrhage are favored by delay in the completion of abortion, by lengthening the time in which hemorrhage can occur and the time for the multiplication of such germs as may be present in the genital tract. Hence, it may be accepted as an axiom, that in inevitable abortion the process should be terminated promptly.

EXPECTANT *versus* OPERATIVE TREATMENT.

Experience has shown that in a large percentage of cases the ovum will be thrown off entire by the natural effort, and with good results to the woman. This fact is the basis of the expectant treatment. Experience has demonstrated that this occurs most often in abortion prior to the end of the third month. On the other hand, under expectant treatment, in a large percentage of cases alarming hemorrhages and septic infection take place, with serious and even fatal results. Such ill results are most common in criminal abortion, in cases where the ovum is ruptured, and in cases developed beyond the third month. These facts are the basis of the operative treatment of abortion.

The remarks which follow are based on my own experience, which is now no longer small.

Expectant treatment should be employed prior to the fourth month, if the ovum is entire, hemorrhage trifling and sepsis absent. Treatment may be restricted to confining the patient to bed and using vaginal disinfecting douches.

Broadly speaking, all other cases should be treated by emptying the uterus promptly. This line of action is urgently required when infection has occurred, when hemorrhage is free and when the pregnancy is advanced beyond the third month.

The tampon I have rarely used. It is an unsafe method of treatment. When properly applied it guards against hemorrhage, but favors infection. Personally, I would never use the tampon longer than twenty-four hours. It finds its best use when the patient is somewhat remote from the doctor, and

in cases of such alarming hemorrhage that the emptying of the uterus is contra-indicated. The most important principles concerning the tampon are: 1. Use it seldom. 2. Disinfect the vagina, the tampon and the physician's hands and instruments. 3. Introduce it by the Sim's method, and pack the vagina firmly. 4. The tampon material (cotton or gauze) should be squeezed out of sublimate solution, 1-4000.

Ergot is a remedy which, I believe, does more harm than good. If the cervix be widely dilated it will usually do no harm, though even under these conditions, at times, it will cause contraction of the internal os and imprison the ovum. This result is the rule rather than the exception, when it is administered with an undilated cervix. The best rule for the use of ergot in abortion is not to give it until the process has been completed.

To empty the uterus artificially, the patient should be anæsthetized, full disinfection practiced, the patient placed in the lithotomy position, two fingers or the half hand introduced into the vagina and one or two fingers introduced into the uterus. The womb should be forced down by manipulation with the physician's other hand—pressing on the patient's hypogastrium. In this way the uterus can be emptied in at least ninety per cent. of such cases. In a few cases it will be necessary to dilate the cervix with steel dilators. The ovum is easily peeled off the womb by using the intra-uterine finger and the hand grasping the uterus from without, conjointly.

When infection has not taken place it is sufficent to remove all portions of the ovum, and then to wash out the endometrium with sublimate solution. It is prudent, in such cases, to introduce a suppository of idoform containing twenty-five grains and to pack the uterus with iodoform gauze. This should be removed the following day, when, if the temperature is normal, the subsequent treatment may consist of daily vaginal douches of sublimate solution.

It is the fashion at this time to use the curette very freely. My own experience in the treatment of abortion antedates the present line of practice, and I am able to say from my experience, that the curette is unnecessary unless the endometrium has been infected. It is admitted, of course, that in skillful hands the decidua can be scraped off with a minimum risk, and in such hands the practice is unobjectionable, but for the physician of average experience, I am satisfied that it is best to use the fingers alone, in the non-septic cases.

If however, infection has taken place, it is unquestionably better to thoroughly remove not only the fœtal parts of the ovum, but the maternal decidua as well. In the course of nature this is thrown off as detritus, and its removal with the curette is simply hastening the result obtained by nature's process. A further gain is made by removing a large number of the contained germs, and at the same time the culture medium in which they are developing. The employment of a very large cutting curette is advisable, as this will quickly remove the decidua and be less apt to perforate the uterus, than a narrow curette.

The danger of puncturing the uterus is by no means imaginary. It has

been done many times by skillful men, and therefore the risk of this accident in the hands of the inexperienced is very considerable.

The curette should be employed for the removal of the decidua, only after first removing all portions ofthe ovum. As showing the necessity for this advice, I will refer to the experience of a well-known gynecologist, whose skill is universally recognized, who, as he supposed, thoroughly curetted the uterus for abortion, and informed the family that everything was removed. On the following day, upon visiting the patient, he was shown an entire ovum which had escaped from the womb after his departure. This experience illustrates the fact that it is impossible to tell with the curette whether or not the womb is empty. This can only be done with the finger, and the sooner this fact is learned by the practitioner, the fewer will be his disappointments and surprises in the treatment of abortion.

To return to the treatment of cases in which infection has occurred, we will say in conclusion, that it is most important in these cases to thoroughly douche out the uterus, and to introduce iodoform (in suppository) and iodoform gauze after the completion of the curetting.

The foregoing line of practice, which has been briefly and somewhat dogmatically described, is in my judgment the best for inevitable abortion, and were it faithfully followed by the profession in general, I am satisfied that death from abortion would very rarely occur, and that the number of cases in which it would prove necessary to remove the uterine appendages, for incurable inflammatory conditions, would be very materially diminished. The practice which is now only too prevalent, of failing to make use of rigid antiseptic measures, permitting the process of abortion to drag on for days, and at times even weeks, is responsible for most of the deaths which now occur from abortion, and also for one-third of the operations which are now performed for the removal of the uterine appendages for inflammatory conditions.

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