

ABORTION

AND ITS TREATMENT, FROM THE STAND-POINT OF PRACTICAL EXPERIENCE

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FROM NOTES

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drugs, of which they have read in books, to facilitate the expulsion of the troublesome product of conception. With many women, you must understand, abortion is not regarded as a *great* crime, and they are, unfortunately, prone to condone it.

In this connection,* let me give you a remarkable case which occurred in my own experience. On one occasion, a few years ago, I was sitting at breakfast, when the servant announced that there was a gentleman down-stairs asking to see me who seemed to be crazy. I accordingly went down, and found a fine-looking man about thirty-five years of age who was walking the floor and appeared to be in a perfect agony of anxiety and excitement. He told me that he was a physician from a western town, and that he had come on with his wife who had injured herself in an attempt to produce an abortion. He stated that his wife, believing herself to be pregnant, had become so alarmed, from the fact

* This case, at the time of its occurrence, was published in detail in the American Journal of the Medical Sciences.—P. B. P.

that at her last confinement she had suffered severely from puerperal fever, and that she had insisted on getting rid of the product of conception by artificial means herself. Accordingly, wishing to humor her, he had procured and prepared for her an iron umbrella-rib, telling her that if she would introduce it into the uterus her purpose would be accomplished. In his absence she had attempted this procedure, and found that the rib, having once been pushed in, kept going on and on, until at last it was suddenly grasped by something and pulled up entirely out of her reach, disappearing within the uterus. In answer to my inquiry how long his wife had been pregnant, he replied "two months."

Though this story seemed utterly improbable, I at once went to see his wife at her hotel, and found a very handsome woman lying in bed apparently in a perfectly healthy condition. Her pulse and temperature were normal, and she stated that she suffered no pain whatever, and that the only thing of which she complained

was a slight cough. Under the circumstances I thought it best to make an examination of her chest, and asked her to sit up in bed for this purpose. As soon as she did this she gave a sudden gasp, as though she were in great agony, and she suffered so greatly from difficulty of breathing that it was five minutes before I could go on with the examination.

I then believed that the history told by her husband was true, and, fearing that the most serious consequences might ensue, I determined to perform laparotomy at once. Every preparation was accordingly made for the operation, but just as the ether cone was about to be applied to her face an uncle of hers, who was present, remarked to me that if I proceeded it must be on my own responsibility, and that if anything untoward happened he would invoke the law to punish me for my temerity. This announcement somewhat startled me, and, as I had undertaken the case merely to help a fellow-practitioner who was in sore distress, I asked the patient if she would take the risk

of the operation, and she said "no." I then asked her if it was really true that she had used the umbrella-rib and it had disappeared, as stated, and she replied that "she didn't know." In such a state of affairs I felt that it would be utterly unjustifiable for me to go on with the laparotomy, and I accordingly ordered that the instruments which had been made ready should be put up. In a week after this the woman died.

The husband utterly refused to have an autopsy made ; but, as I was unwilling to give a certificate of death without learning something more about this obscure case, I insisted on placing it in the coroner's hands, and was thus enabled to obtain a post-mortem examination. The result of the examination was as follows : I found a non-pregnant uterus of normal size, and just to the right of the cervix uteri there was a puncture of the vaginal wall, evidently made by the umbrella-rib mentioned. Through this orifice the rib had gone, and as it passed upward through the abdominal cavity it had

scraped the surface of the liver. After transfixing the diaphragm, it penetrated the right lung to the extent of two or three inches, and in this position it was found at the autopsy. It was no doubt a spasm of the diaphragm, resulting from the irritation of the rib piercing it, which had caused the sudden snatching upward of the latter, as described by the husband in his narrative.

The rib was thirteen inches in length, with its point somewhat sharpened, and surrounding its upper extremity, in the lung tissue, there was an abscess, which had not as yet discharged, but from which septic influences had emanated. I mention this case not only on account of its peculiar interest, but to show you to what lengths women will go under these circumstances. In this instance it was the dread of another attack of puerperal fever which rendered the patient morbidly anxious about the matter.

But to return to those exceptional cases in which the product of conception is retained un-

der circumstances which, in the vast majority of instances, would at once result in its expulsion. In Paris pregnant young women who have attempted suicide by jumping into the Seine, and have been rescued, have been known to go on to full term without the slightest threatening of abortion, notwithstanding the tremendous shock and mental strain incident to such an adventure. There is a case related, by Mauriceau I think, in which a pregnant woman, excited by an alarm of fire, jumped from an upper window, and, breaking through a shed by the force of her descent, struck upon the stone flagging below. When she was picked up it was found that several of the bones of her body were broken, but, nevertheless, she passed on to full term as though nothing had happened.

Some years ago while a lady, whom I knew very well, was walking out one day in the woods with her husband, a huge black-snake sprang out apparently from the bushes and coiled itself several times around her neck, at the same time spattering her with blood. Her

in cases where antiseptic methods are neglected in the treatment. I am speaking now, you will understand, of the prognosis as to life. As to the matter of health I can not express the same opinion, for it is an unfortunate fact that vast numbers of women are invalided by abortion. Criminal abortions are usually performed by charlatans, in the roughest and most unscientific manner, and it is no wonder that the results are so frequently disastrous. When, however, abortion is artificially produced by the intelligent physician, in fulfillment of indications furnished by science, the prognosis is not bad.

If a woman dies during or after an abortion, what is it that kills her? In order to understand this we must, first of all, appreciate what is taking place. The foetal shell, consisting of decidua reflexa, chorion, amnion, and placenta (if the latter has been developed), has got to come out. The decidua vera is usually torn away in places. Let us inquire, therefore, what are the elements of danger, or the sequelæ of abortion.

The principal ones may be stated as follows :

1. Hæmorrhage.
2. Putrid intoxication.
3. Septicæmia and peritonitis.
4. Suppurative arthritis.
5. Cellulitis and abscess.
6. Embolism.
7. Air in the veins.
8. Tetanus.
9. Uterine hydatids.
10. Melancholia.

The first five of these conditions are common as sequelæ of abortion ; the last five are rare pathological curiosities.

Let us suppose that you check the hæmorrhage. Is the woman perfectly safe ? No. It may be that, even if the physiological process is not interfered with by the administration of opium or other sedatives, the uterus will not be able to expel its contents. In a short time putrefaction of the product of conception ensues, absorption from it takes place, and the patient suffers from what is known as putrid intoxica-

tion. The effect is the same as that which would be produced on any one by making an opening in the arm and inserting within it, so that it will come in contact with the tissues, a piece of flesh. As the latter undergoes putrefaction the whole system will become more or less infected, as indicated by headache, pains in the back and limbs, quickened pulse, high temperature, and a general feeling of *malaise*.

You will notice that I put septicæmia and peritonitis together under one head. I do this because, in my opinion, peritonitis following abortion never occurs as primary peritonitis, unless it is of traumatic origin—that is, unless the peritonæum has in some way been wounded. In other words, the peritonitis which follows abortion is, as a rule, septic in character. As to the origin of the septicæmia and peritonitis; the finger of the physician may convey to the parts the poison giving rise to the trouble without any influence from the secundines themselves. It is now just nine years ago since I had a very painful realization of how very small an amount of

such poison may cause the most serious results. Just after the opening of my private hospital I was one day performing an operation for the removal of a sloughing fibroid, and it was noticed by all present that the odor arising from the putrid mass was of the most disagreeable description. While I was washing my instruments after the completion of the operation I chanced to prick my little finger with the point of a tenaculum which had been used during the operation. This was before the days of bichloride in surgery ; but I at once sucked the wound thoroughly, and not only washed it with a carbolic-acid solution, but applied some pure carbolic acid to it. This was at 3 P. M. At 7 P. M. on the same day I had a slight chill, and by the next morning my finger was enormously swollen, while there rapidly followed enlargement of the lymphatic glands of the arm, and an abscess formed in the palm of the hand.

All this followed from the introduction of a minute portion of septic material into a part not very vascular or abundantly supplied with

nerves. Suppose that such an accident should occur in connection with a uterus enormously vascular and with its innervation exalted to the highest pitch, as is the case during pregnancy, and you can imagine what the result would be.

Now as to suppurative arthritis resulting from abortion. Some twenty years ago I had a lesson taught me which I never can forget. My friend Dr. Lewis A. Sayre, who was ill, asked me to see for him a patient who had recently had an abortion, and on visiting her I found the wrist, elbow, and ankle enlarged and painful from what seemed plainly to me to be acute articular rheumatism. About a week later I was asked by Dr. Sayre to see the same patient with him, and you can imagine my surprise and chagrin when I found an accumulation of pus in each of the joints named. Since then I have always been very suspicious of every case that seemed like acute articular rheumatism when the patient has recently had an abortion, and I would earnestly caution you to be on your guard in regard to such cases, for the trouble

is much more likely to be suppurative arthritis than rheumatism. Such arthritis sometimes ends in death, but, fortunately, the patient just mentioned recovered. This case illustrates very well what I said to you in the first lecture of the difference between learning and being taught. Here I had to learn by my own experience what I ought to have been taught by my instructors.

I will not stop to speak particularly of cellulitis and abscess, but will pass on to the next element of danger. A certain number of cases of abortion end very curiously. You are suddenly called to a patient who has had an abortion, and find that she has all at once become hemiplegic, and that the cause of the trouble is embolism. In my large experience I have seen but two such cases.

The entrance of a small amount of air into the veins is not likely to prove very serious, but when air gets into the large sinuses which are found in connection with the pregnant uterus, a fatal result is very apt to occur. I know of a case of criminal abortion, which occurred

some years ago, in a town about thirty miles from New York, in which the patient died instantaneously of heart failure from this accident, the air being introduced through a hollow instrument which was used in bringing on the abortion.

Of tetanus resulting from retention of membranes in the uterus I have met with two instances in my experience. In such cases the trouble commences in the uterus (arising from putrid infection), and thence is transmitted to the nervous centres as an ascending neuritis.

Sometimes after an abortion a portion of membrane remains in the uterus, and if this consists of tufted chorion its villi are liable to undergo proliferative degeneration, with the result of the formation of what are known as uterine hydatids. With the multiplication of these hydatids the uterus goes on increasing in size until it attains nearly or quite the proportions of the organ at full term, and this condition leads to a great many errors in diagnosis.

There is only one more consequence of abor-

tion of which I will speak—viz., chronic melancholia—and this, like the last five conditions enumerated in my list, is very rare. This kind of melancholia will be found to run a course less severe, according to my experience, than that following labor at full term.

haps ask me why. Remember, in the first place, that a human life depends upon your decision. It is better, therefore, that the responsibility should be shared. He who can take a human life into his hands without a desire to thus have the responsibility divided is not, in my opinion, a man of proper feeling.

If the physician whom you consult does not agree with you that abortion should be produced, the pregnancy may be allowed to go on; but if he does agree with you on this point, your position is naturally very greatly strengthened. Such a course as I have recommended is in the interest both of the patient and of the medical attendant.

Let us next inquire what are the indications for the artificial induction of abortion. In a general way, it may be stated that whenever it is felt that the prolongation of pregnancy is going to destroy the life or intellect, or to permanently ruin the health of a patient, abortion should be brought on. It is a well known fact, for instance, that a large number of pa-

tients die every year from the vomiting of pregnancy. It was to this condition that the gifted Charlotte Brontë, who married somewhat late in life and who was believed to be suffering from acute gastritis, unfortunately fell a victim. As I have indicated, you will have to be on your guard against deception. Many women will either use drugs to produce vomiting, or else they will suffer from nausea only when the physician is in the room. Such women generally influence their husbands at will, and you must get the evidence of a trustworthy nurse, or of friends who are not under the influence of the patient. Then, again, the general character of the vomiting, and the condition of the patient, will assist you in deciding whether her sufferings are real or not. When you find that the obstinate vomiting is a reality, and it seems probable that the woman will die if she is not relieved, it will be nothing less than criminal not to bring on abortion. In such cases it is astonishing to see how quickly the symptoms are relieved and the patient be-

gins to improve in every way, when the uterus has once been emptied of its contents.

But there are other conditions besides uncontrollable vomiting which call for artificial abortion. There is some peculiar influence over the kidneys exercised by puerperality, the nature of which we do not know. It is a fact, however, that a great many women die annually of puerperal nephritis. As a rule, such nephritis does not begin until after the fourth month, but in exceptional cases it occurs even earlier than this; or, possibly, the patient may have had desquamative nephritis before the commencement of pregnancy. I can not but regard it as cruel to allow a patient with marked symptoms of this affection to go on in utero-gestation, with the imminent risk of dying in labor of puerperal convulsions, or, if she does not die then, of being doomed to chronic Bright's disease with its attendant suffering and dangers.

In the next place, if you have a pregnant patient with cardiac disease of such a character that you think her life is in danger, it is

your duty to induce abortion. If she should have cancer, or be in the third stage of phthisis, you should not do this, because, in the first class of cases, you have two lives to consider, as the woman may have a long life before her, while in the last it is impossible that she should live under any circumstances.

The fourth condition which I would mention is chorea. In one case only in my experience have I had to induce abortion on account of this affection. The trouble was so violent that I feared the patient would die before the end of gestation, and I therefore brought on abortion at the end of the fourth month.

Fifth, when the pelvic diameters are very much contracted, so as to render delivery at full term absolutely impossible, the uterus should be prematurely emptied.

While acknowledging the improvements that are constantly being made in the management of the Cæsarean section, Porro's operation, and similar procedures, I still do not believe that, when we can avoid it by inducing abortion, we

are justified in subjecting our patient to the great risk attending these operations even under the most favorable conditions.

Sixth, in case of violent convulsions from any cause whatever, abortion is indicated. It makes no difference whether the convulsions are choreic, uræmic, epileptic, or of any other character except hysterical. Even if you succeed in controlling the seizures for the time being, it is entirely improbable that the woman can go on for five months, or more, longer without a return of the trouble, and most likely in a form so aggravated that death will inevitably result.

Seventh, artificial abortion is called for sometimes on account of uncontrollable uterine hæmorrhage. Placenta prævia is a condition which does not occur at the early period of pregnancy which we are now considering, and the hæmorrhage to which I refer is occasioned by the separation and sliding away of the *decidua reflexa* from the *decidua vera*. After styptics and the tampon have been given a thorough trial, and the trouble still continues,

there is nothing left for us but to bring on abortion ; for, if this is not done, the most serious results will almost certainly ensue.

In this enumeration I do not pretend to give you all the conditions which may from time to time call for this measure. I only aim to show you some of the principal ones, as they have been met with by me in actual practice, and to point out to you the general principles which should guide you in deciding whether in any case of serious difficulty that presents itself you ought to resort to artificial abortion.

The next step naturally is to consider the methods by which abortion is brought on ; and the procedures which I mention first I only refer to in order that you may carefully avoid them. The first method is to introduce a metallic sound into the os uteri, and push it forcibly through the foetal shell. If there be a brutal and stupid method of inducing abortion, it is certainly this. Yet it is done every day, and is the one commonly practiced in criminal abortions. There is no doubt whatever about its killing the foetus,

but, after the latter has been killed, its dead body is left to rot in its shroud. You must understand that when I call this procedure brutal I do not mean that it is brutal to the patient at the time, for she experiences no pain whatever from the piercing of the foetal shell; but that it is brutal in its results, since the foetus may remain in the uterus for three months, or longer, and during all this time its presence there is attended with the most imminent risk of putrefaction and septicæmia.

The second method is to take a tent of sponge, sea-tangle, or tupelo, and, by introducing it into the *os internum*, cause dilatation of the cervical canal, and thus excite the uterus to contract and bear down upon its contents. This is perhaps a little less brutal than the other, but only slightly so. It is impossible to prevent the entrance of bacteria in the use of any kind of tent whatever. Not long since my colleague, Dr. Chambers, had some sea-tangle tents prepared with every antiseptic precaution, but, notwithstanding this, they were

afterward found to teem with bacterial life under the microscope.

Let me here digress a moment to say a word in regard to sponge tents. I never use them now under any circumstances whatever, and regard them only as something connected with ancient history. They have been superseded by other and better devices, just as the stage-coach and whale-oil have been superseded by the railway and by gas and the electric light. The stage-coach and the oil answered well enough as long as we had nothing better; and just so it has been with the sponge tent. At the present day these tents ought not to be used in puerperal conditions, and indeed, I think, not even in non-puerperal conditions. I have seen several deaths due to this cause. Now, mark you, I myself have employed them up to two or three years ago; but formerly I also used to travel by the stage-coach and read by the oil-lamp. I no longer use tents of any kind, however, because there are much better and safer means

at hand for accomplishing the same purpose.

The third method is to take some instrument like the uterine sound and, slipping it carefully up into the uterus and along its wall, gradually separate the *decidua reflexa* from the *decidua vera*. There is not a great deal of danger connected with this procedure, and it is the only one of these defective methods of inducing abortion that I would advise you to adopt under any circumstances whatever. It is much less objectionable than the others, because when you have thus separated the two membranes from each other you still have a living foetus left, and at the same time your manœuvre has excited uterine contractions which will ordinarily result in its expulsion. Still, I would not make use of this method myself.

Next, I may mention, in passing, the use of certain drugs, such as ergot, savin, pennyroyal, viscum album, or mistletoe, and the root of the cotton-plant. These are things which the

charlatan might resort to, and which are commonly employed by ignorant women; but no scientific physician would ever think of placing any dependence upon them whatever. The effect of such drugs is to excite the uterus to tetanic spasms while the os is undilated and the whole organ totally unprepared to perform the work which is expected of it. To make use of them is like driving a spirited horse up to a closed gate, and still urging him to go on when there is no way to get through it.

Now, having spoken in this disparaging way of the various methods commonly in vogue, you will naturally expect me to show you some better way; and this I will try to do. These are the methods which have come down to us from the past; the one to which I will next call your attention is of modern origin, and entirely in accord with the best scientific teaching of the day, as regards the all-important matter of antisepsis.

Let us suppose that you have a patient at the end of the third month of pregnancy in

whom exist conditions which, in your opinion, call for the immediate induction of abortion, and that the physician whom you have called in consultation agrees with you as to the propriety of this procedure. It is important that the abortion should be brought on promptly. How shall you set about it? In this way. Anæsthetize the patient with ether, not chloroform, and place her on a table in the Sims position. The vagina, vulva, and anus having been thoroughly cleansed with carbolized water, take a sponge saturated with bichloride solution (1 to 2,000), and with it fill the vagina with the solution. By this means the os will be placed in a lake of the antiseptic fluid. But may not the bichloride poison the patient? Well, I have never yet met with this accident; but, even if the mercury should affect her system to some extent, the dose will not be sufficient to kill her, and it is better to run this slight risk rather than expose her to the danger of septic infection.

Next you catch the cervix with a little te-

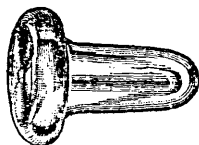
naeculum and dip it below the surface of the bichloride solution. You will thus perceive that this is a subaqueous operation, and on that account it is as free from the risk of being attended with untoward results as it is possible to make it. With a divulsor of small size you stretch the cervical canal as far as you can in all directions. About three minutes is taken up with this procedure, and you then introduce a larger divulsor and stretch the canal still further. If it is at the end of the third month, and the divulsion has been successful, you can now carry your finger through the cervix. You next introduce a glass plug, of larger or smaller size, according to circumstances, such as I show you here, and which is as large as the index or the little finger, as the case may require. Having gotten this well up into the cervix, you pack the vagina with iodoform gauze, and then apply a tampon in the manner already described to you. This is all you have to do; and, having done it, you can go home and leave the case to nature.

Within twelve hours the woman will probably have pain, and this is the first symptom of abortion under these circumstances. Very likely she will then vomit, and this is the second symptom. Finally, a little blood will probably ooze through the tampon, and this is the third symptom.

The plug and the tampon may be left in position for from thirty-six to forty-eight hours. When you remove them you can, if necessary, stretch the os again, and put in a larger plug, sustaining it with iodoform gauze, as in the case of the first one. You need not be anxious to hurry the labor-pains. They will come on fast enough, and the plug will probably be at last forced out by the contractions of the uterus. Behind it will come the product of conception, and then the whole thing will be over. This is all that I ever do now in these cases of artificial abortion, and I am satisfied that you will get good results with this method when you come to practice it. I know also that you will avoid the bad results that are so apt to fol-

low the old methods which I have mentioned to you.

I did not mention to you that the plug to which I have made allusion is about an inch and a half in length, and provided with a broad shoulder, which prevents its entrance into the uterine cavity, while the tampon keeps it perfectly in position in the cervical canal. The following figure represents its shape and medium size.



Where the case is quite urgent, I never hesitate to use the divulsor, and with forceps or large curette at once to remove the entire foetal shell. I have done this about a dozen times I think, and so far have had no bad result from the practice.

THE END.