

case of abortion, it becomes evident that we should fully understand the process Nature requires to be fulfilled, and how the result is accomplished, and how we may best render assistance when it is required. We should also understand when Nature is able to effect the various steps necessary to a safe and perfect result.

By an abortion, then, we mean an expulsion of the contents of an impregnated uterus any time within the period of the first three or four months of impregnation. After this period, or during the fourth, fifth, sixth and seventh months, should such expulsion take place, we term it a miscarriage, and after the seventh month to full term it is called premature labor.

Now, in order that we may grasp the significance of abortion, as I have said, it will be necessary for us to familiarize ourselves with the physiological condition of the uterus after the ovum shall have entered its cavity, and, having done that, we can readily see the processes to be performed when, from any cause, the ovum shall be separated and expelled. It has been shown that the uterine mucosa, in way of preparation for the reception of the ovum, is thickened about ten-fold, becomes more vascular, and is thrown into numerous folds or convolutions, due to the increase of the cellular elements, this producing a soft, pulpy bed for the reception of the ovum. This soft, thick mucous membrane is known as the decidua vera. In this decidua vera lodges the ovum, and the surface under the ovum, made up of the decidua vera, is now known as the decidua serotina, and is the beginning of the *placenta*. Folds of the decidua vera grow up around the ovum, and finally meet and enclose it in a cavity of its own, shut off from the general cavity of the uterus. These folds of the decidua vera now become known as the decidua reflexa. During the first two months the fœtus is surrounded by a shaggy enveloping membrane, through which it draws its nourishment. At the end of this time this villous membrane becomes bald in its outer aspect down to the third of its surface, which lies most intimately attached to the uterine mucosa, and is now to be the placenta. Thus we see that a formed placenta does not exist until about the third month, or the termination of the period in which we may have an abortion.

The foetal membrane or chorion is intimately applied to the maternal or decidua membrane. The decidua vera is not shed and expelled naturally in every case, until the term of gestation shall have expired, at which time it is thrown off by a very moderate degree of contraction of the uterus, without much hæmorrhage (except when the placenta is attached) this constituting complete gestation and parturition. Now that the office of the decidua has been fulfilled, at full-term delivery, a new membrane is developed underneath, ready to supply the place

of the old to be exfoliated, and this protects the intra-uterine muscles.

With this brief physiological examination of the processes taking place in the uterine mucous membrane during gestation, and especially in the early stages, we must be impressed with the fact that Nature has placed in the uterus a thickened membrane with certain offices to perform, requiring for their perfection the period of nine months, or a normal gestation; hence, whenever we have an abortion, from any cause whatever, we have a pathological condition to treat, and in this no more than in any other pathological condition can we leave it to Nature in every case; nor, on the other hand, can we profitably do that which shall defeat a natural or philosophical process. We must be impressed, it seems to me, that the treatment should be almost unanimous, or having the same end in view, viz.: the removal of the decidua, maintenance of perfect asepsis, and drainage. Now, when we shall have so treated a case as to fulfil these indications, we shall have done all that can be done in averting conditions of sepsis which are attended with serious results to the patients, in the shape of septic endometritis, metritis, salpingitis, abscess, etc.

Let us examine now some of the more common methods of treatment employed, and note the result in not a few cases. Perhaps the most orthodox plan of treatment in the majority of instances is, if the fœtus is expelled, to give ergot and retire. If the cervix is partially dilated, with the membranes protruding, ergot is given to expel them. If the cervix is not dilated, and an abortion is imminent, a tampon is used, if anything is done. When the fœtus is expelled a finger is introduced, and the clots and some of the membranes which are loose are cleaned away. A possible vaginal douche completes the antiseptic of the case. The patient gets ergot, and possibly quinine, for a few days until she recovers or develops a septicæmia, which sometimes receives the proper care and saves the patient; or she may go on and die, as do not a few every year.

Now let us see if there are not certain indications to be met in every case of evacuation of the uterus before the fourth month. We have seen the uterine mucosa developed into a thickened protective or receptacle, so to speak, destined to do a certain work for a certain period, viz., for nine months time, then to be exfoliated, being supplanted by a submucous membrane destined to replace the decidua. Such, however, is not the case in these earlier months, and yet a process of disintegration and shedding must take place, and a new membrane follow. This disintegration consists of a fatty degeneration, a dissolution and discharge, called the lochia. If, then, the uterine cavity is to be freed of its membrane, which has by the separation of the ovum been in a greater or less degree