Long Island Med J 1907 V-1

THE TREATMENT OF INEVITABLE AND IMCOMPLETE ABORTION.

BY JOHN OSBORN POLAK, M.Sc., M.D.,

Attending Gynecologist to the Williamsburgh, Jewish and Deaconess Hospitals; Attending Obstetrician to the Methodist Episcopal Hospital and Chief of Department of Gynecology Polhemus Memorial Clinic.

IN treating this subject I will confine myself to the consideration of those cases of abortion occurring before the beginning of the fourth month.

An abortion is inevitable when hemorrhage occurs and persists and the ovum loosens and descends into the lower segment of the uterus, or protrudes at the external os, or when part of the chorion or liquor amnii escapes. Before instituting treatment, it is always desirable to determine when a threatened abortion be-

Digitized by Google

history-of-obgyn.com

comes inevitable; this may be done with a fair degree of certainty, after establishing the existence of a pregnancy by the history, mammary and pelvic signs, by noting the following symptoms and physical signs: The rythmical uterine pains associated with sacralgia and pelvic tenesmus, the chilliness or chills, the nausea or occasional vomiting, together with vaginal hemorrhage are the classical symptoms of a threatened abortion. Never treat a patient with such a symptomatology, without first making a careful pelvic examination, in order to exclude the possibility of an ectopic pregnancy. If the patient is actually aborting, the uterine contractions are present and increasing, the uterus is hard and contracted from tetanic spasm or alternately hard and soft, the cervix is soft, open or dilating, the ovum protruding or the utero-cervical angle effaced by the obliteration of the internal os, due to a descent of the ovum. This is a positive sign when the abortion occurs in an anteflexed or retroflexed uterus. When these signs are present together with persistent and increasing hemorrhage, the ovum cannot be saved.

During the first three months the ovum is usually expelled as a whole or broken up, with more or less hemorrhage. After the third month the delivery corresponds more closely to the course of labor at term, there being the stages of dilation, expulsion and placental delivery as in actual labor.

This fact, as well as proper understanding of the pathological possibilities of an abortion must be appreciated before any line of treatment is adopted.

Every abortion has several pathological possibilities. There may be complete emptying of the uterine cavity, of its entire contents, i. e., the decidua vera, the decidua reflexa, the amnion, the chorion, and the fetus. This only occurs in the early weeks of pregnancy. Or the fetus may be expelled with the amnion and chorion, while the *decidua vera is left within the uterus*. Thirdly, the fetus may be expelled and the amnion and chorion remain in the uterus. Or when the gestation is a little further advanced the fetus and membranes may be expelled and the placenta left behind.

The management of an inevitable abortion, therefore, must meet and fulfil the following indications, i. e., the control of hemorrhage, the avoidance of sepsis, the complete evacuation of the uterus, and its proper retraction and involution. To do this the uterus must be emptied of its entire contents, with the least possible trauma under the strictest asepsis.

The plan which I have followed, with some success, when an abortion is inevitable, is to administer a quarter of a grain of morphia hypodermatically. This relieves the pain, but does not arrest the contractions, while it does relax the dilating cervix and hasten the labor. The hair is next clipped from the vulva and the pudendum cleansed with green soap and warm water, using a pledget of cotton wrapped in gauze as a scrub. The cleansing extends to the pubes, lower abdomen, and the inner surfaces of the thighs. The parts are then bathed with a 2 per cent. lysol solution, and the patient placed in the Sims, or if I am without assistance, in the knee-chest posture, and a firm cervico-vaginal tampon of sterile or iodoform gauze applied. To introduce the cervical plug, the portio must be grasped and brought down with a volsellum forceps, and the cervical canal firmly packed; the cervix is then released and the uterus allowed to fall back in the pelvis, and the vagina is filled with gauze or sterile cotton by placing it about the cervix, in the fornices, distending the vaginal canal to its full capacity. Several three or four inch gauze bandages, which have been previously boiled, serve as excellent packing material. A tamponade thus applied, not only controls the hemorrhage, but makes the subsequent removal of the ovum easier, by completing

Digitized by Google

history-of-obgyn.com

its separation and dilating the cervix, thus facilitating the succeeding evacuation and minimizing the bleeding. Tamponning a patient in the dorsal position is an inefficient procedure, as it neither controls the hemorrhage completely, nor does it plug the passages sufficiently to effect a separation of the ovum.

This tamponade should be left in position for at least twelve hours, when it may be removed and the uterine contents evacuated by the forceps, finger and curet. I have come to consider a general anesthetic a necessary adjunct to good work. For the separation of the decidua from the uterine wall takes place from above downward, and is best removed by the curet, when the abortion takes place before the third month. When curettage is elected, it must be skilfully and carefully done under the most rigid asepsis, for no operation in surgery exposes the woman to greater danger from faulty technique. On the other hand, when the decidua is completely removed the convalescence is smoother and the post-abortal sequellæ are minimized.

After the third month, the aseptic finger serves as the best curet. Following such a curettage, the uterine cavity may be irrigated with a sterile saline solution, though for several years I have omitted this step, save in the presence of sepsis, and then the woman receives but one intra-uterine douche.

The uterus should never be packed after it has been completely emptied, except for hemorrhage, as an empty uterus drains itself better than tube or gauze can do it. It is my custom, however, to place a firm tampon of gauze in the vagina after curettement, and to leave it there for twenty-four hours. This pack stimulates the uterus to contractions and loosened débris and small clots are expelled which would otherwise remain within the organ for many hours; again, by raising the uterus in the pelvis a better circulatory equilibrium is established and nature has a better opportunity to effect her hemostasis.

Should it be necessary to tampon the interior of the uterus for bleeding a pack of iodoform or zinc oxide gauze is to be preferred; the gauze should not be left in the uterus longer than twelve to eighteen hours and then gradually withdrawn, so as to allow a clot to form, and replace the pack; this assures proper retraction of the organ and the control of hemorrhage. Sudden withdrawal of the intra-uterine tampon is occasionally followed by smart bleeding from the unsupported sinuses.

INCOMPLETE ABORTIONS.

An abortion may be considered as incomplete when any part of the ovum or decidua vera is left within the uterus. The diagnosis is to be made between ectopic, membranous dysmenorrhœa, and normal menstruation. It is, therefore, necessary to establish a diagnosis of a previously existing pregnancy, from the history, mammary signs, and the expulsion of some of the products of conception. The hemorrhage is usually persistent, but variable in amount; it is at first bright red, later dark brown, thick and offensive and associated with intermittent attacks of uterine colic, resembling after-pains. The lochia may contain shreds of decidua, amnion or rudimentary placenta; the os is more or less open and may be patent to the finger, and decidua, membranes, pieces of placenta and blood clots may be found within the cavity. The uterus is large and soft and involution is slow or absent.

Briefly, therefore, an incomplete abortion may be recognized by the bloody discharge, sepsis or failure of involution as instanced by the soft boggy uterus, the patulous cervix and the detection during the examination of fragments of the ovum. On the other hand if the abortion has been wholly completed, that is, if the entire uterine contents, including the hypertrophied decidua have been completely expelled, the uterus is firmly contracted and the os is closed. The management of incomplete abortions

Digitized by Google

history-of-obgyn.com

is purely surgical, for drugs have little or no effect on the expulsion of retained portions of the ovum. Hemorrhage, sepsis and adnexal inflammations, with their complicating sequellæ, can alone be controlled and avoided by prompt aseptic emptying of the uterus. Here again, as in the treatment of inevitable abortions, the strictest asepsis and the most delicate skiil are necessary to evacuate the uterus without traumatizing the passages. No expectant plan of treatment has given any satisfaction; the situation should be explained to the family, as well as the dangers from the possible sequellæ and the necessary operation made.

The cases of incomplete abortion will divide themselves into those in which the cervix will admit the finger and those in which the os is not sufficiently dilated.

In the former class, with the patient under an anesthetic in the dorsal position on a table, the abdomen, thighs and vulva thoroughly cleansed with soap, warm water and a soft scrub, and the vagina disinfected by being gently scrubbed with a cheese cloth sponge on a pair of dressing forceps, the suds washed away with sterile water followed by a lysol douche, and the cervical canal disinfected with the tincture of iodine, the operator crowds down the uterus and fixes it with one hand over the abdomen, while with the other hand in the vagina, and a finger in the uterus, he digitally explores the entire cavity and any portion of a retained placenta or other fetal remains may be loosened and removed. While the manual method just described is safer for the practitioner, in general practice it is distinctly inferior to instrumental evacuation in the hands of the skilled pelvic surgeon or, in hospital practice, for there can be no question that the decidua vera is best removed from above downward with a large dull curet, even when the cervix will admit the finger. The combination of the finger and the curet in such cases is the ideal.

When the cervix will not admit the passage of the finger, as is the case in the early months, the patient should be anesthetized and placed in the dorsal position, after the usual antiseptic preparation, and the cervix exposed by a weighted or Sims speculum; the cervix is grasped by its posterior lip with a vulsellum forceps and the canal dilated if necessary with a steel branched dilator to a degree sufficient to permit the passage of a large dull curet (as the Munde instrument.) The cavity is then gone over systematically, beginning at the fundus with each stroke, and the loosened débris washed out with an intra-uterine douche of sterile salt solution, or if the pieces be too large to wash away, an Emmet placental forceps will be found useful to withdraw the fragments of ovum.

As I have previously stated, the uterus is never packed except for hemorrhage if the cavity has been completely emptied. Occasionally, however, we may be so unfortunate as to be unable to loosen pieces of adherent placenta or membranes with either the finger, curet or forceps, in which case these retained fetal products may be separated, without hemorrhage or trauma, by fixing the cervix with a tenaculum and firmly packing the interior of the uterus (the membranes or placenta still within) with strips of iodoform gauze, or if the case be septic, with plain sterile gauze moistened in a glyceride of formalin (Formalin M 30, glycerine 1 oz, water 15 oz.). The vagina is also tamponned with some non-absorbable sterile material. After such a tamponade a few doses of ergot will cause and maintain sufficient contraction to separate the adherent structures. At the end of twenty-four hours the gauze may be withdrawn and the detached placenta or membranes will be found presenting at the external os and may be readily removed with a pair of dressing forceps.

Too little attention is usually given to the after treatment of abortions. It is forgotten that it takes longer to complete involution after

Digitized by Google

history-of-obgyn.com

an abortion than following labor at term, yet this is the clinical fact. Again, more patients get up from an abortion or miscarriage with retrodeviation of the uterus, hyperplastic endometritis and adnexal inflammations than is the case after labor. These sequellæ I believe can all be prevented, first, by the proper aseptic evacuation of the uterus; second, by giving to the patient such aftercare as will promote retraction and involution. Rest in bed for ten or twelve days is imperative. Douches should not be given before the end of the first week, and then a douche of sterile water at a temperature of 120° twice daily. There is some advantage, notwithstanding its inconvenience, in using the Davidson syringe for this douche, as the intermittent stream alternately flushes and depletes the parts. Following each douche, the patient should be taught to assume the knee-elbow position, which allows the uterus to rise up out of the pelvis by gravity and empty the venous plexuses in the broad ligaments. This change of posture further acts as a sort of massage for the ligaments. Before the patient is permitted to assume the upright position and walk, she should be subjected to a careful bimanual examination to ascertain the position of the uterus and the condition of the parametrium. For if there is a retrodeviation, now is the time for its correction. This may be readily accomplished, in the majority of cases, after placing the patient in the knee-chest position and introducing a Sims speculum into the vagina, by grasping the cervix with a double tenaculum by its posterior lip; the uterus is drawn down, almost to the vulva in the axis of the vagina, to dislodge the fundus from below the sacral promontory, the cervix is then pushed upward and backward into the hollow of the sacrum; this tilts the fundus forward, where it is held by intra-abdominal pressure when the patient assumes the upright position. Before the cervix is released a wool tampon saturated with boroglycerine is placed in front of and below the cervix to maintain it in its posterior position. This tampon may be left in place for forty-eight hours, when it is withdrawn, while the patient is in the knee-elbow posture, the vagina swabbed out with an antiseptic solution and another tampon put in place. This treatment may be repeated every second or third day until all inflammatory changes in the vagina and cervix have subsided, when a properly fitting pessary will keep the uterus in place until the natural supports have regained their tonicity. By such attention one may cure movable post-abortal retrodisplacements and save his patient much suffering and subsequent surgery.

More or less endocervicitis invariably follows abortion. This is associated with some degree of eversion and erosion of the cervical mucous membrane, producing a muco-purulent leucorrhea. A few applications of Churchill's tincture of iodine, followed by a boroglyceride tampon, readily clear up this little complication. Finally, general tonic treatment, fresh air and the proper attention to the gastro-intestinal tract, tend to bring the case to a happy termination.

Digitized by Google

history-of-obgyn.com