

OBSTETRICS

UNDER THE CHARGE OF

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Rupture of the Uterus through the Cesarean Section Scar.—NOVAK (*Jour. Am. Med. Assn.*, July 13, 1918) states that in 1913 there had been reported 63 cases of rupture of the uterus through a Cesarean section scar. In 1916 this had increased to 74, and others have been reported. His own case is as follows: A white woman, aged nineteen years, had a Cesarean section May 5, 1916, for eclampsia; the child was dead but the mother recovered, with a slight infection of the abdominal incision. The second pregnancy was normal in every way, the last menstruation having been the end of August, 1917; the patient went into labor and was sent to the hospital, where she stated that she had but a few typical labor pains, when these were followed by severe and constant pain over the entire abdomen, with rigidity of the abdominal wall. This persisted for three days, with fever and slight increased pulse. At about the fourth day the patient felt better and remained in the hospital awaiting active labor. No fetal heart sounds were heard after the abdominal pain, nor did the patient perceive fetal movements. About six weeks after the expected time of confinement the patient was examined, when the abdomen was enlarged to the size of a full-term pregnancy. The walls were so rigid that the fetus could not be palpated; there were no heart sounds. On vaginal examination no presenting part could be felt. The cervix was closed and firm, not resembling that of pregnancy. But one diagnosis seemed possible in the case, rupture of the uterus through the scar, with escape of the fetus into the abdominal cavity. At operation a thick spongy tissue was found just above the umbilicus, which proved to be a placenta. The amniotic sac was opened just above the placental area and about 2 quarts of amniotic fluid escaped. A large partly-macerated fetus was found lying obliquely in the abdominal cavity, the head above and to the right under the diaphragm, the extremities extending downward to the left. The amniotic sac was intact except where it had been incised on opening of the abdomen. After rupture of the uterus it had undergone involution, being about the size one would expect six weeks after labor. Through the line of the old incision the uterus had split asunder, extending from the fundus to about the level of the internal os. The placenta had been turned out through this opening, partly reimplanting itself later on the anterior parietal peritoneum. Both Fallopian tubes were covered with light adhesions and the right ovary was cystic, about the size of a small hen's egg. A subtotal hysterectomy was performed, the left ovary, which was normal, being saved. On removing the body of the uterus, with the tube, placenta, umbilical cord and fetus, a very large cavity was left. The inside of this was lined by tightly adherent amniotic membrane, which was removed where this was possible. The large cavity was treated by

placing several good-sized eigarette drains in various portions, bringing them out through the abdominal incision. The wound was closed in tiers, reinforced by interrupted silkworm sutures. The recovery from the operation was uneventful, the patient being discharged from the hospital three weeks after its performance. It was interesting to note in this case that although the uterus was ruptured there was no internal hemorrhage or shock. This has been seen by other observers. It is possible that the pressure of the child's head through the rent may have something to do with the prevention of the hemorrhage. There were no signs of old or recent hemorrhage, nor was there to any appreciable degree shock at the occurrence of the rupture. The occurrence of infection of the abdominal incision with fever for several days after Cesarean section in 1916 is very significant, and according to our knowledge of the causes of rupture of the scar this gives ample explanation for its occurrence in this case; the invasion of the uterine scar by decidual elements is thought by some to be an important factor.

Delivery by Abdominal Section.—DAVIS (*Am. Jour. Obst.*, May, 1918, reviews the conditions which are today admitted to be valid indications for delivery by abdominal section. He states that at present delivery through the vagina is limited to those cases in which a living child can thus safely be born with minimum injury to the mother. Great disproportion between mother and child with living child, accidental separation of the normal placenta, rupture of the uterus, ectopic gestation, a history of previous labor, with unusual difficulty with fetal mortality and maternal morbidity, and the presence of foreign growths making vaginal delivery impossible, give a clear indication for delivery by abdominal section. Placenta previa and prolapsus of the cord in primiparous patients, with partly dilated cervix and cases of eclampsia, where the birth canal is undilated and unyielding, are said by him to be valid reasons for delivery by section. The advantage of elective section at a time and under circumstances most favorable to patient and physician is set forth. The advantage of the classic section and the fact that it enables the operator to close the uterus most efficiently, thereby preventing subsequent rupture of the scar, are stated. Cesarean section for a peritoneal fistula is stated to give good results in the hands of those skilled in its employment, but it is not yet practised by the majority of American obstetricians. Should the indication be present to sterilize the patient the advantages of hysterectomy, with the removal of the tubes and ovaries and often the appendix, are considered sufficiently great to commend this operation. When delivery must be performed in septic cases the rule should be observed that the uterus should be extirpated or that the uterine stump should be left outside the peritoneal cavity. Delivery by abdominal section is undoubtedly the safest method of birth for the infant. The statement is made that the operation is not unnecessarily performed, and to illustrate this the records of 51 hospitals in one city are cited. In these in one year there were 73,905 operations described as surgical, 6498 operations called gynecological and 862 under miscellaneous headings (operations of the nose, throat, eye and ear), giving a total of 86,255 operations. During the same year in these hospitals there were performed 114 deliveries by

abdominal section. This would scarcely indicate that delivery by abdominal section is too frequently performed. The writer states that up to the time of writing his cases of delivery by abdominal section which were uninfected and in fairly good condition at the time of operation numbered 194, with a maternal mortality-rate of 1 per cent., and cases infected and in bad condition when delivered numbered 66, with a maternal mortality-rate of 30 per cent. The general mortality-rate was approximately 8 per cent., which compares favorably with other major surgical operations performed upon a similar number of cases varying in all degrees of preparation, absence of preparation and complicated and uncomplicated conditions.

Can the Frequency of Some Obstetrical Operations be Diminished?
—VOORHEES (*Am. Jour. Obst.*, June, 1918) reviews the conditions pertaining in obstetric practice some years ago and draws attention to the fact that the high application of forceps and version are considered operations of very uncertain result and avoided if possible; craniotomy is rarely performed. Eclampsia has become much less frequent than formerly. The number of patients delivered in the hospital is greatly increased and there are more physicians who are specialists in obstetrics and there has been a general improvement in obstetric education. He believes, however, that there is still much indifference, ignorance and bungling work among the rank and file of the medical profession who practice obstetrics, and even obstetricians are guilty of mistakes and errors. One of the crying needs is for more faithful attention to pregnant patients to prevent toxemia; urine examinations should be frequently made and thoroughly done and a careful physical survey of the patient should be thoroughly conducted. A nitrogen partition in the urine should be made whenever indicated. If traces of albumin are found, a daily examination should be made. While it is true that acute fulminant toxemia may suddenly destroy a pregnant patient, most cases have premonitory symptoms, which call attention to the necessity for treatment, and if the patient does not respond to such treatment pregnancy must be interrupted. The writer states that in his private practice he has had but one case of eclampsia; before labor this patient did not obey directions, nor were specimens sent regularly. To illustrate the fact that eclampsia is becoming less he quotes the statistics of the Sloan Hospital; these show that from January 1, 1901, to December 31, 1905, inclusive, there were 113 cases of eclampsia in 7145 deliveries, or 1.5 per cent. From January 1, 1911, to December 31, 1915, there were 74 cases of eclampsia in 9224 deliveries, or 0.8 per cent. These statistics would indicate that more patients consult their physicians early in pregnancy and that the patients have better care. He calls attention to the value of correcting by external manipulations abnormal presentations. In the first 200 cases which the writer delivered there were ten breech presentations, while in the last 200 cases there were but six deliveries with that presentation. The writer admits that it may be impossible to change a breech to a head presentation in a primipara where the fetal legs are extended and this is especially difficult if there is a scanty amount of amniotic liquid. It is also possible in many cases to change a brow or face presentation to a vertex. In

all cases where there has been the production, in former pregnancies, of an unusually large child, measures should be taken to limit the development of the fetus in any subsequent pregnancies. This may be done conveniently by limiting the amount of carbohydrates which the woman takes after the sixth month. He calls attention to a case in which the patient had borne a first child successfully; in subsequent pregnancies there was great difficulty because the shoulders were largely developed and could only be delivered by extreme traction resulting in the loss of the child. In the third confinement a very strict diet was followed, with the result that a well-developed and nourished child was born spontaneously. In another case the induction of labor completed the care during pregnancy. To limit the over-development of a child he believes long walks during pregnancy are exceedingly valuable and also the wearing of a carefully-fitted corset. He draws attention to the success of Cesarean section in contracted pelvis; a very careful measurement of the pelvis will show that in the essential diameters there is considerable room; where however there is evident disproportion of a marked nature, then Cesarean section, often elective, gives good results. Regarding pituitrin, the conditions present for its safe employment are as follows: The cervix must be completely dilated and effaced and the membranes ruptured, the presentation normal and there must be proper relation between the fetal head and the maternal pelvis throughout. The writer has little confidence in the so-called "twilight sleep" method, but has found that nitrous oxide and oxygen are sometimes beneficial; if used too long and too frequently there is a distinct tendency to postpartum hemorrhage. The writer has faith in the efficacy of quinin and castor oil to bring on labor and in the action of a dilating bag introduced one or two weeks before full term. The statistics of the Sloan Hospital show that the use of forceps and the induction of labor are less frequently employed than formerly, but there seems to be an increase in the high forceps operation, which the writer says is surprising. Craniotomy is much less frequent; symphysiotomy and pubiotomy have been practically abandoned. Cesarean section has become much more common. He states the case of a primipara, aged thirty-six years, from whom had been removed the appendix and gall-stones. There was more or less abdominal pain and discomfort during pregnancy and the patient stated that she could not walk. Pelvic measurements were normal; the child was in breech presentation; this was changed to a vertex. An attempt to bring on labor by castor oil and quinin was made, but this failed; when labor developed it was delayed by an unusually firm cervix and a bag was introduced and later high forceps operation was performed. The child died as a result of pressure. The cervix was considerably torn and the mother made a tedious recovery complicated by phlebitis. The writer also states the case of a woman, aged thirty-eight years, in whom the fetus died from some unknown cause during pregnancy and after giving birth to several children; she lost several pregnancies by abortion and death of the fetus. This produced a condition of mental depression. Her last conception occurred when she was forty-four years old and the patient was carried on to within three weeks of term, when an elective section was done which resulted successfully. In this case the Wassermann reaction was always negative and no definite cause could be found for the death of

several of the children during pregnancy. The indication is that Cesarean section is frequently performed, and when the operation is chosen with good judgment the results are exceedingly good. It must, however, be remembered that in each case an operation is to be avoided rather than chosen and that very often ordinary measures, patiently and skillfully applied, are successful. It seems to the reviewer that while many obstetric operations are less frequently performed, there is a special need for skill and knowledge in obstetrics and for the exercise of good judgment. The success of Cesarean section impels many physicians and surgeons to undertake it who have not had experience to choose it wisely nor training to perform it properly. Good judgment is required to know upon what indication to induce labor, and no greater mistake can be made than the indiscriminate induction of labor. The management of pregnancy is most important as regards the labor which awaits the patient, and much can be done in this way to obviate dangerous and difficult procedures. The most hopeful sign in obstetric work is the fact that obstetrics is recognized as an important and distinct specialty for which special and thorough training is necessary, and which embraces a wide and important field in pathology and operative surgery. While certain operations may be less frequent, the demand for skill, experience and judgment is greater than ever before.

Sensitized Vaccines in the Prophylaxis and Treatment of Infections.
—CECIL has contributed an extremely interesting paper upon this subject, giving a table of cases and the totals of his observations. His experience includes 20 cases in which sensitized typhoid vaccine was employed, 16 cases in which a sensitized gonococcus vaccine was used, 5 in which a sensitized streptococcus vaccine was employed and 1 case in which he employed sensitized *Staphylococcus aureus*; 4 cases of tuberculous adenitis and in 1 case of Pott's disease he used sensitized tuberculin. He finds that a vaccine sensitized with a homologous serum produces less disturbance when injected subcutaneously than does non-sensitized vaccine. In his series of 47 cases in typhoid it was found that the sensitized vaccine gave less reaction than the ordinary typhoid vaccine; as this may indicate that its protective power is less, it would not be advisable to substitute it at present for the ordinary vaccine. So far as the results obtained were concerned the sensitized vaccines gave no better effect than the ordinary vaccine. There were a few cases of recovery after treatment where ordinary vaccines had failed, but this may have been because a larger dose was used, which was made possible by the lessened disturbance produced by the sensitized vaccine. The chief objection to their use lies in the increased labor and time required in their production, and it would seem advisable to limit their use to those infections in which there is unusual sensitiveness to the ordinary vaccine or in which the ordinary vaccine had failed. While the writer does not mention puerperal septic infection, his cases include two patients suffering from gonorrheal vaginitis and one case of gonorrheal urethritis during the pregnant condition.