

MONTREAL MATERNITY HOSPITAL.

The following is an abstract of the sixty-third annual report of the Montreal Maternity for the year ending September 30th, 1907.

The work of the Maternity during the past year has shown an increase of, roughly, 50 per cent. over the previous year, and the results have been satisfactory, although the maternal death rate ($1\frac{1}{2}$ per cent.) has been comparatively high. Eight of the nine deaths occurred in patients sent in consultation; as autopsy was permitted in all cases, the responsibility for the death could be placed where it really belonged.

The foetal mortality has been high, but not unusually so. Here too, with a few exceptions, autopsies have shed much light on the true causes of the fatal issue, and Dr. Klotz, of the Royal Victoria Hospital, has prepared post-mortem records in each instance. While the number of infants born at term that have died in the hospital has not been large, there is no doubt even better results could have been obtained had more space been available for the accommodation of infants.

The number of admissions has been as follows:—Remaining over in the hospital, October 1st, 1906, 30. Admitted during the year, 570. Total, 600. This includes 26 patients remaining in the hospital October 1st, 1907.

The total number of hospital days has been for adults, 12,368; for infants, 7,240, and the average number of patients per day,—adults, 34; infants, 20. The average stay of each patient in hospital was 20.9 days. Of the patients in the hospital before confinement the average stay was 12.9 days, while after confinement it was 15.6 days.

Of the 574 completed cases there were, primiparæ, 299 and multiparæ, 275. Their status was, single, 134; married, 436; widowed, 4; There were Protestants, 340; Catholics, 172, and Hebrews, 62.

The private patients numbered 128, the public 446, the number of private patients being double that of last year. Attention is specially directed to the fact that the increase has been chiefly in the Protestant and Hebrew patients, the number of Catholics remaining very much as it was last year.

The birth places of the 574 patients were as follows:—Canada, 259; England, 137; Russia, 48; United States of America, 43; Ireland, 29; Scotland; 28; Austria, 11, and others in smaller numbers.

The general results were as follows:—Maternal:—Discharged in good condition, 560, transferred to other hospitals, 5; remaining in hospital, October 1st, 26; died (see under "Maternal Deaths"), 9.

Infantile:—Total adult admissions, 600; twin pregnancies, 6; admitted post-partum, discharged ante-partum, etc., 69. In hospital October 1st, 26.

Of 600 patients, 69 were admitted after or before confinement, but there were 511 births, from 600 patients entered. Of these, there were dead born, 30, still born, 8; died in hospital, 34, a total of 72, while those discharged in good condition numbered 439.

Of the 34 that died in the hospital 17 were premature infants of poor vitality. The other deaths in the hospital were from the following causes:—Hæmophilia, 2; broncho-pneumonia, 2; congenital malformation, 2; syphilis, 2; abdominal hæmorrhage, 2; septic arthritis, 1; tuberculosis, 1; gastro-enteritis, 1; umbilical infection, 1; unknown, 3.

Those classed as still births, (form alive but impossible to resuscitate) were as follows:—Under 7½ months, 4; tight coil of cord, 1; monstrosity, 1; forceps injury, 1; unknown, 1.

Of those born dead, the following conditions were shown:—Prolapsed cord, 5; syphilis, 2; maternal nephritis, 5; maternal toxæmia, 2; maternal cardiac disease, 2; maternal eclampsia, 3; maternal typhoid, 1; anencephalus, 2; hydrocephalus, 1; placenta prævia, 1; internal hæmorrhage, 1; breech extraction, 1; forceps injury, 1; unknown, 3.

Classification of pelves:—Normal, 382; contracted, 65; generally contracted, 36; generally contracted rachitic, 5; flat and rachitic, 5; simple flat, 10; contracted outlet, 9; unmeasured pelves, private patients, etc., 127. Total, 574.

Special attention has been paid to the careful measuring of the pelves of all public patients and many interesting observations have been made and recorded. The number of pelves classed as contracted, according to

the usually accepted standard has not been so large, but the number contracted at the outlet has been unusually so and while but nine have shown this contraction in a marked degree, a very large number have possessed this deformity in a sufficient degree to seriously affect the course of labor. Another observation of interest has been that the course of labor in two patients with the same pelvic contraction may vary widely, as in the one instance where a child of 14 gave birth to an infant spontaneously, while in a woman of 28, Cæsarean section was necessary to obtain a living child. In both of these the pelvis was flat, with a diagonal conjugate of 10.2 cm.

Complications of Pregnancy, etc.—The number of abortions (25) shows a marked increase over last year. This is probably due to the fact, that we are now able to admit these cases, whereas in the old Maternity they could not be admitted on account of lack of room. In cases of threatened abortion marked success has been obtained by keeping the patient at rest and administering sedatives. In two cases of habitual abortion one was carried to term by the administration of large quantities of potassium iodide.

2. Cardiac complications have been interesting and instructive; when seen in time there was no difficulty in carrying the patient successfully through pregnancy and labor. Heart stimulants have been given, often in large quantities, without any apparent effect upon the pregnancy, and in a number of cases the patients were confined by operative procedures without the use of a general anæsthesia. In such cases hypodermics of morphia were usually given and the patients showed no ill effect from the operation.

3. A most unusual and interesting case of cardiac embolism occurring on the tenth day after accouchement forcé for placenta prævia lateralis, has already been reported before the Montreal Medical Society.

4. There has been a number of pregnancies after abdominal operations, the most interesting being two after nephrectomy. In neither of these cases was there evidence of renal insufficiency.

5. The treatment of eclampsia has been more active than heretofore, and, particularly where the child was viable attempts were made to empty the uterus as soon as compatible with the safety of the mother. Unfortunately a number of cases were sent in from outside with the child already dead in utero. In addition to the emptying of the uterus great stress has been laid upon the administration of large quantities of fluid by mouth and by the rectum, and in certain cases by infusion and transfusion; bowels have usually opened freely after large doses of magnesium sulphate. In those cases of eclampsia where the kidneys were

but slightly affected the patient's general condition improved in direct proportion to the diuresis obtained. Even in cases with considerable renal disturbance beneficial results were obtained so long as care was taken to see that the output of urine equalled or exceeded the quantity of fluid given.

6. A number of cases of chronic nephritis have been treated with more or less success. In a number of instances these cases showed marked improvement after delivery, but later in the puerperium, usually about the 7th day, became markedly worse—two of them died.

7. Probably the most interesting of all the complications of pregnancy has been tuberculosis. Five tuberculous patients have been confined and all have done remarkably well; the children were placed upon artificial feeding, and all born at term have survived.

Technique.—The technique in the hospital has been modified very little during the past year, except that the use of rubber gloves has become much more general. No operation on any of the public patients has been performed without gloves being used.

Douches have been used even less than last year; a post-partum douche was given in but a single instance while ante-partum douches were used only where there was marked rigidity of the cervix. In cases of slow involution, however, hot douches given from the 10th to the 14th day have had a marked beneficial effect.

Induction of labor.—For the induction of labor the use of the silk bougie has been practically abandoned and large rubber catheters (27 F.) have been used. These are more readily sterilized, and are also cheaper; while their insertion is perhaps slightly more difficult, there is less danger of rupture of the membranes or perforation of the uterus. The operation was performed eighteen times and its repetition was necessary but once, the labor invariably coming on within four to eighteen hours. The time of onset would seem to vary directly with the amount of irritation set up inside the uterus and the care taken in the insertion of the bougie.

Craniotomy.—Craniotomy was performed three times, and in each instance for the same condition:—Generally contracted pelvis with prolapse of the umbilical cord. In only one of these cases could the child have been saved; this was one seen outside the hospital, and at that time the child was alive. There was so much delay in bringing her to the hospital that the child had perished in the interval.

Pubiotomy.—Pubiotomy was done once on account of marked narrowing of the pelvic outlet, the patient having expressed a strong desire to have a living child. As the attempt to deliver by means of forceps were unsuccessful, version and rapid extraction were done to save the child.

The operation was complicated by an excessive tear of the perineum, and also one of the vagina which communicated directly with the pubic wound. Obstruction developed at the site of the pubic wound probably due to infection from the rectum, at the time of delivery. In this case the child was saved but the mother died.

In this type of pelvis, pubiotomy with version, seems an undesirable operation, for if, as in the majority of cases, the arms are swung above the head it is impossible to reduce them without extensive laceration of the vagina which is practically sawn through by the sharp edge of the pubic bone during the manipulation to free the arm on the side of the wound.

Cæsarean Section.—Cæsarean section was performed twice. The first patient had a simple flat pelvis, D.C. 9.5. with a child that she had carried eleven lunar months: this operation was eminently successful both for the mother and for the child.

The second was a private patient with chronic nephritis and such œdema of the vulva and vagina that delivery by ordinary means was absolutely impossible. In this instance too, the operation of itself was successful as the child was born alive and the mother's condition was much improved. Unfortunately uræmic convulsions supervened and the patient died of nephritis on the 14th day.

Complete tears of the perineum.—Complete tears of the perineum have occurred nine times, one of these cases being in a private ward. The complication was present once after pubiotomy; twice after version and extraction; and six times after the application of forceps. Immediate suture gave excellent results in all but two cases, one the private patient referred to, and the second a case in which the sutures were placed badly and infection from the rectum resulted. The routine has been first to bring the mucosa of the rectum together with fine cat gut, then to unite the ends of the torn sphincter by means of No. 2 cat gut, and after placing deep sutures of silk worm gut to bring the skin of the perineum together with a subcutaneous catgut suture.

Episiotomy.—Median episiotomy has been done in a number of cases, particularly where a narrow sub-pubic angle threw the head far back on the perineum. Delivery in these cases can only be accomplished with very extensive laceration, and indeed all cases of complete tear of the perineum were due to this condition. If, however, a straight cut is made when the perineum is distended there is much less danger of involving the sphincter, and the wound is easy to repair.

Hæmorrhage.—Hæmorrhage has not occurred as a serious complication in any of the labors. True, a number of patients have lost a large

quantity of blood, but this was ascertained by collecting and measuring the amount lost, rather than by any change in the patient's condition. In a number of cases the loss was 1,200 c.c., and in one instance 2,300 c.c., accompanied by no systemic disturbance, while the loss of much smaller amounts in other cases markedly affected the patient's pulse and general condition.

Ophthalmia.—In cases of severe ophthalmia we have been able, thanks to the courtesy of the visiting ophthalmologist, to obtain much more satisfactory results than heretofore, as a careful bacteriological examination of the secretion has shown that a number formerly suspected of being gonorrhoeal were due to other organisms and responded readily to varying forms of treatment.

Outdoor.—1,047 visits were made from the outdoor department; 101 women were confined; 98 of the children lived.

The usual hospital routine has been modified and made even more simple for the conduct of these outdoor cases. When the patient is registered she is given a card which is sent to the hospital when the doctor is needed.

The patient is guaranteed attendance at confinement by a qualified physician and for ten days is visited by a nurse from the hospital. On the 10th day the doctor from the hospital is required to examine the patient and to see that she is in a fit condition to be discharged.

At the commencement of the service we had three cases with temperatures reaching 102°, but since the adoption of the same standard of hand sterilization as in use in the hospital and the uniform use of rubber gloves, we have had but one temperature above 101° in the last 80 cases confined.