Am J Obs Dis Women & Child 1911 V-64

THE TREATMENT OF PLACENTA PREVIA AT THE SLOANE HOSPITAL FOR WOMEN.*

BY
EDWIN B. CRAGIN, M. D.,
New York.

(With six illustrations.)

IN discussing the treatment of placenta previa at the Sloane Hospital, the cases of this obstetric complication occurring in 25,000 consecutive deliveries will be considered and will be divided into two groups.

Series A.—Those occurring in the first 20,000 deliveries.

Series B.—Those occurring in the last 5,000 deliveries.

This grouping is made for the reason that in the 20,000 deliveries placed in series A the cases of placenta previa were treated by different methods—by Braxton Hicks' version and using the half breech as a uterine tampon, or by gauze tamponade of cervical canal and vagina, or by dilatation of the cervical canal by the Voorhees bags.

In the last 5,000 cases one general plan of treatment has been followed.

*Read before the American Gynecological Society May 23, 1911.

Digitized by Google

history-of-obgyn.com

Some idea of the frequency of placenta previa in a maternity hospital can be gained from the fact that in these 25,000 deliveries there were 223 cases of placenta previa or 1 in 112+. This of course is a somewhat greater frequency than occurs in private practice for the reason that many cases, which if normal would have been treated at home, are sent to the hospital on account of the complication, and it must be borne in mind that many of these cases reach the hospital in poor condition, perhaps as a result of faulty treatment, or neglect of treatment at home.

In all discussions concerning the treatment of this condition, the variety of the placenta previa should be considered. A good practical classification, and one adopted by most obstetricians, is as follows:

1. A *complete* placenta previa, where the placenta completely covers the internal os (see Fig. 1).

2. An *incomplete* placenta previa where the placenta does not completely cover the internal os. It may be *partial*, overlapping

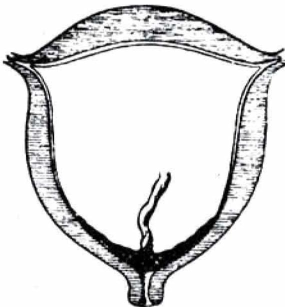

Fig. 1.—Complete placenta previa.

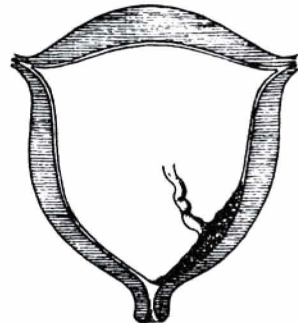

Fig. 2.—Partial placenta previa.

the internal os (see Fig. 2); *marginal*, just reaching the internal os (see Fig. 3), or *lateral*, lying in the lower uterine segment but not reaching the internal os (see Fig. 4).

In these 223 cases of placenta previa occurring in 25,000 deliveries there were fifty-three of the complete variety and 170 of the incomplete variety.

The present method of treatment of placenta previa at the Sloane Hospital is that pursued in those cases (forty-nine in number) occurring in the last 5,000 deliveries, and the results represent not only the work of the writer but also of his four assistants. The personal equation is therefore largely eliminated and the

Digitized by Google

history-of-obgyn.com

results represent the method rather than the individual. In this series of forty-nine cases of placenta previa the treatment, in cases needing any treatment save that of normal delivery, consisted in: 1. Dilatation of the cervix and control of the hemorrhage with the largest Voorhees bag which could be introduced, *i.e.*, No. 3 or No. 4.

2. After the largest bag had passed the cervix and good dilatation was obtained, either a version was done and the child delivered by the breech or, if the placenta previa was lateral, or in some cases even marginal, with slight hemorrhage, and the vertex was presenting, the membranes were ruptured and the head was allowed to come down and exert pressure upon the lower uterine segment and the edge of the placenta, the delivery being ex-

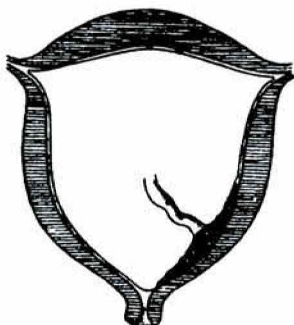

FIG. 3.—Marginal placenta previa.

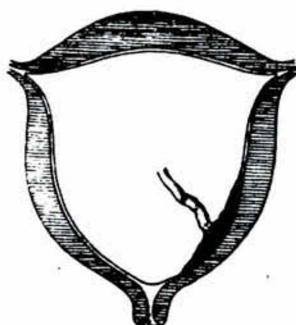

FIG. 4.—Lateral placenta previa.

pedited by the forceps if necessary. From the above description it is seen that this use of the elastic bag is extraovular and that the membranes are kept intact until the bag passes the cervix and good dilatation is obtained. This method is preferred by the writer to the intraovular use of the bag chiefly in the interest of the child, but with little if any detriment to the interests of the mother.

If the membranes are ruptured and the dilating bag placed within the amniotic sac, the version which follows has to be performed in a uterus largely emptied of fluid and with greater danger to the child and greater danger of rupture of the uterus—an accident unfortunately not uncommon in placenta previa. Furthermore, experience proves that the presence of the dilating bag beneath the edge of the placenta in an incomplete placenta previa (see Fig. 5) usually checks the hemorrhage without dis-

Digitized by Google

history-of-obgyn.com

secting the placenta to any great extent from the uterine wall, and in the complete variety it has seemed to me to cause less naturial blood loss when used beneath the placenta (see Fig. 6) than when the placenta has been bored through and the bag placed above the placenta in the amniotic sac. The use of the elastic bag both to dilate the cervix and to control hamorrhage, may well summarize then our present method of treating placenta previa preliminary to any method of delivery. This applies as indicated above to all cases needing any treatment save that of a normal delivery. Cases of the lateral variety occasionally present so little hemorrhage that no treatment related to the placenta previa is indicated. A few of these cases were met with

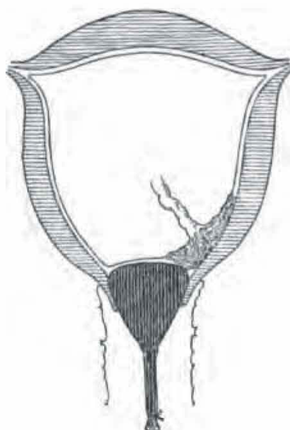

FIG. 5.

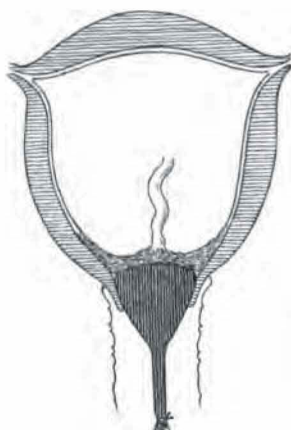

FIG. 6.

in this series of forty-nine and were left to nature. Other cases bleeding a little more, but with vertex presenting and cervix dilated, were treated by artificial rupture of the membranes and the use of the head as a tampon. In a few cases brought to the hospital bleeding profusely and with cervix dilated, version and breech extraction have been employed without the preliminary use of the elastic bag. In thirty of the forty-nine cases, however, the bag has been used as the first step in the treatment.

The objection raised to the use of the largest size or No. 4 Voorhees bag in ordinary cases of vertex presentation, where dilatation of the cervix or induction of labor is desired, is that it is apt to displace the presenting part and favor prolapse

Digitized by Google

history-of-obgyn.com

of the cord. So valid is this objection that in ordinary vertex cases I almost never use the No. 4 bag.

In cases of placenta previa, however, this objection does not hold for in the complete and partial variety of the incomplete, one usually terminates the delivery by podalic version and therefore has no objection to the displacement of the presenting part, and, furthermore, the wider the dilatation at the time of beginning the version and extraction the better the result for mother and child. It has been argued that the presence of the bag beneath the placenta in a complete placenta previa, as shown in Fig. 6, would separate so much of the placenta from the uterine wall that the fetal circulation and oxygenation would be interfered with and the child be lost. Our experience seems to show that this interference with the uteroplacental circulation is not greater than in other methods employed per vagina and that the fetal mortality is satisfactorily low.

Of course the first question of importance in any method of treatment is the maternal mortality. In this series of forty-nine cases in series B (fourteen of the complete variety and thirty-five of the incomplete) there were four maternal deaths, *i.e.*, 8 1/10 per cent., but of these four that died, one died of infection following a Cesarean section, the placenta previa being associated with a flat pelvis, and one died of toxemia, leaving only two deaths, or 4 per cent., from uncomplicated placenta previa, and of these two, one lived only thirty minutes after reaching the hospital, being nearly moribund and with child dead on admission. Of these four that died, two were those of complete placenta previa and two incomplete (one partial and one lateral), these latter dying of secondary conditions, infection and toxemia. The maternal mortality then, from treatment by means of the extraovular elastic bag for complete placenta previa, was two in fourteen or 14 2/10 per cent.

When we study series A, where different methods of treatment were employed, we find a total maternal mortality of twenty in one hundred and seventy-four cases or 11 4/10 per cent. as contrasted with 8 1/10 per cent. of series B, under our present method of treatment. Furthermore, the maternal mortality of complete placenta previa in series A, was nine in thirty-nine, or 23 per cent., as contrasted with two in fourteen, or 14 2/10 per cent. in series B.

The total maternal mortality of incomplete placenta previa in series A was eleven in one hundred and thirty-five, or 8 1/10 per

Digitized by Google

history-of-obgyn.com

cent., as contrasted with two in thirty-five, or 5 7/10 per cent., in series B.

It must be noticed however that in incomplete placenta previa maternal deaths are often due to complicating conditions rather than to the placenta previa, *per se*.

In series B both of the deaths in incomplete placenta previa were due to conditions other than the placenta previa itself.

The next question of importance in the discussion of any method of treatment of placenta previa is the fetal mortality.

In the forty-nine cases of series B thirty-two children were delivered alive; eight died subsequently, six from prematurity and two from other causes and seventeen were still-births. This gives twenty-five in forty-nine, or 51 per cent., as the total infant mortality. In the 174 cases of series A there were eighty-seven still-births, and eighteen which were born alive died subsequently, giving a total infant mortality of 105, or 60 3/10 per cent. In series B there were ten of the forty-nine cases in whom the pregnancy had advanced less then seven months and in one case the child was dead when the mother entered the hospital.

This left only thirty-eight cases in whom saving the child could be considered possible and of these thirty-eight, twenty-nine children were delivered alive and twenty-four left the hospital alive, so that 63 1/10 per cent. of the children viable on the admission of the mother left the hospital alive.

In regard to the question of placenta previa being an indication for Cesarean section the writer can only state that he has never met with the case in which he has considered it indicated. In one of the cases in series B, Cesarean section was performed by one of his assistants but here the indication was a flat pelvis, not the placenta previa. The writer believes that the indication for Cesarean section in placenta previa occasionally arises. He has recently performed it in a case of accidental hemorrhage with long, rigid, undilated cervix with profuse hemorrhage, and he believes that similar conditions in a placenta previa may well indicate the same operation. That Cesarean section is often indicated in placenta previa he does not believe.

10 West Fiftieth Street.

Digitized by Google

history-of-obgyn.com