

DIABETES IN PREGNANCY WITH OBSERVATIONS  
IN 28 CASES\*

MARTIN M. SHIR, M.D., BROOKLYN, N. Y.

**I**NSULIN has made pregnancy relatively safe for the diabetic mother. On the other hand, it has complicated the problem because we now see patients with severe diabetes, who in the pre-insulin era would never have been pregnant. Furthermore, insulin has led the practitioner into a false sense of security and this undoubtedly has been the cause of some maternal and many fetal deaths. There are several aspects of this problem which warrant discussion.

1. SAFETY OF MOTHER

In the past five years we have had 28 pregnant diabetic women at the Jewish Hospital. No mothers were lost.

It may be stated that a maternal death from diabetes requires proof that this death was not avoidable. Whereas even in the best of hands such an accident may occur, it should be rare. Joslin has been able to report 73 pregnancies without a maternal death from diabetes, even though 22 of his cases were in total diabetics.

The price for this maternal safety is close collaboration between the obstetrician and the diabetic specialist. Few obstetricians are capable of handling such a problem without help.

---

\*Read at a meeting of the Brooklyn Gynecological Society, November 4, 1938.

it likely that the cause of the high incidence of toxemia in diabetic women lies in the pituitary.

#### 5. HYPERINSULINISM OF INFANT

It is believed that the baby borne by the diabetic mother may secrete an increased amount of insulin and this may cause hypoglycemia and convulsions in the first few days of postnatal life. Many authors recommend early feeding of dextrose and even intramuscular injection of 10 per cent glucose to prevent hypoglycemia and its consequences.

#### 6. DELIVERY

Within recent years, several authors have advocated cesarean section before term to prevent death in utero. They advise, when the fetus is sufficiently large, to deliver it by section. Such advice is open to question. I do not believe that the number of babies lost by awaiting labor and delivery warrants this radical step. One author reports that three babies died in a series of 14 patients in whom he performed cesarean section to prevent fetal death. Surely it cannot be pleasant to do a section for a fetal indication and then lose the baby from whatever cause.

In these days, when cesarean section is being done for more and more indications, we should hesitate before adding another indication. Cesarean section is still a dangerous operation and diabetes does not render it less so.

Cesarean section was performed twice in our series. In one case, the indication was cephalopelvic disproportion. In the second case, section was done one month before term because of four previous stillbirths.

It is my opinion that the diabetic patient should be delivered per vagina. If the baby is large and it appears that delivery will be difficult, then cesarean section should be resorted to. In the rare case in which the diabetes cannot be controlled and the condition fluctuates between acidosis and hypoglycemia, section should be done as soon as the fetus is viable and the tubes should be ligated.

Labor must be conducted with extreme care. The diabetic specialist should be in constant attendance. Hourly blood sugar determinations should be made and the urine watched closely for acetone; and treatment should be based upon these findings.

Morphine should be used as an analgesic rather than the barbiturates or rectal ether.

#### 7. THERAPEUTIC ABORTION

Therapeutic abortion was performed four times in our series. In retrospect, the reader believes that this was not always indicated.

Therapeutic abortion is seldom indicated in the diabetic patient today. In the severe case of hyperemesis in which control of the diabetes is impossible, abortion is indicated. There is also the rare case of severe diabetes which becomes worse as pregnancy progresses

and control cannot be maintained. In this case, termination of pregnancy is indicated to save the mother's life. Fortunately, this is seldom necessary.

#### 8. ANESTHESIA

For delivery per vaginam, local infiltration or pudendal block is the anesthesia of choice. For cesarean section, local infiltration is safer than general or spinal anesthesia.

#### 9. CONCLUSIONS

1. Death of the fetus near term can usually be prevented.
2. Adequate care will usually prevent an oversized baby.
3. Death of the mother should be rare.
4. Cesarean section is warranted only for special indications.
5. Therapeutic abortion is seldom indicated.

652 EASTERN PARKWAY