Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Premature Induction of Labour in Haemolytic Disease of the Newborn

Q.—Should labour be induced before term when an antenatal diagnosis of haemolytic disease of the newborn has been made?

A.—All that can be said with certainty about premature induction of labour is that if it is practised as a routine in women whose serum contains anti-Rh it will increase infant mortality. There may be a case for performing premature induction of labour in women who have had previous stillbirths due to Rh incompatibility, although it has never been shown that this does in fact increase the survival rate. The best rule is: When in doubt do not induce labour prematurely.

Antenatal Diagnosis of Haemolytic Disease of the Newborn

Q.—How much help will serology give in deciding whether an infant is likely to be affected by haemolytic disease? Is the severity of the disease related to the agglutinin titre, and, if so, what levels should cause alarm?

A.—The finding of Rh antibody in the serum of an Rh-negative woman who is not pregnant or who has not advanced beyond the twelfth week of pregnancy indicates either that she has previously given birth to an Rh-positive infant or that she has previously received a transfusion or injection of Rh-positive blood. Once Rh antibody has been formed the subject continues to produce it; thus if a woman has once formed Rh antibody it may be found in her serum during a subsequent pregnancy even though she is then carrying an Rh-negative fetus.

When Rh antibody is absent from a woman’s serum during the first three or four months of pregnancy but makes its appearance later it may be assumed that the infant in utero is Rh-positive and will be affected with haemolytic disease of the newborn to a greater or lesser extent. If antibody appears for the first time during the last few weeks of a pregnancy it is likely that the infant will be extremely mildly affected.

Two forms of Rh antibody may be recognized in the serum: namely, saline agglutinin—a form capable of agglutinating Rh-positive cells suspended in saline; and incomplete antibody—a form which agglutinates Rh-positive cells only when they are suspended in certain colloid media. Only the incomplete antibody crosses the placenta; thus a report that a serum contains incomplete antibody has a more serious significance than a report of the presence of saline agglutinin. However, it has to be remembered that saline agglutinin is almost invariably accompanied by a certain amount of incomplete antibody, so that a report that the newborn has Rh-positive blood does not imply that the infant will be unaffected. On the whole, the higher the titre of incomplete antibody, the worse the prognosis; however, individual exceptions are not uncommon and infants with hydrops foetalis may be born to women whose serum has an anti-Rh titre of only 1 in 8. In view of the frequency of exceptions it is unwise to be much influenced by the result of anti-Rh titrations. The best plan is to deliver all women whose serum contains Rh antibody in a hospital where there are facilities for performing exchange transfusion, since there is now decisive evidence that this treatment gives the infant its best chance of recovery.