

# SENSITISED PREGNANCIES & RhD HDN - CURRENT MANAGEMENT

If the mother has been found to have immune red cell antibodies then she requires close monitoring and *must* be referred to a Consultant Obstetrician.

Close liaison is required between the obstetric, midwifery, neonatal and haematology teams, the hospital transfusion laboratory and specialist laboratory at the Blood Service.

## Blood tests

The antibody level must be monitored at 4-weekly intervals until 28 weeks and then 2-weekly until birth.

It is important to determine if the mother has had previous pregnancies affected by HDN.

The father's RhD type may help assess if the baby is at risk of HDN.

It may be possible to test the fetal RhD type using molecular techniques on free fetal DNA (ffDNA) present in a maternal sample

## Assessment and treatment during pregnancy

Invasive tests such as amniocentesis to assess severity of HDN have been replaced by non invasive tests such as Middle Cerebral Artery (MCA) doppler and ultrasound.

If the MCA doppler shows severe anaemia then fetal blood sampling is undertaken followed by an intra-uterine blood transfusion if needed.

## Assessment and treatment after delivery

Cord blood samples must be taken to check the baby's haemoglobin, bilirubin and Direct Antiglobulin Test (DAT) to check if the baby's red cells are coated with maternal anti-D antibodies.

If mild HDN then the baby may need phototherapy only to reduce the level of bilirubin in the blood.

If severe HDN then the baby will need exchange transfusion which replaces the baby's blood with transfused blood, removing harmful bilirubin and anti-D antibody, while at the same time treating the anaemia.

