Manchester University
NHS Foundation Trust

Saint Mary's Managed Clinical Service
Division of Gynaecology

PATIENT INFORMATION LEAFLET

ANTI-D IMMUNOGLOBULIN IN EARLY PREGNANCY

People can belong to one of four blood groups: A, B, AB & O and are either rhesus (RhD) positive or negative.

People who are RhD negative **do not** have the rhesus D antigen on the surface red blood cells. An antigen is what causes the immune system to respond to something it thinks is foreign.

You can inherit blood type from either of your parents, if you are RhD negative you can carry a pregnancy that is RhD positive. In this case, if you experience a sensitising event there is a risk of mixing between the two different types of blood cells.

WHAT IS A POTENTIALLY SENSITISING EVENT?

The most common time blood cells from your pregnancy may enter your bloodstream is at the time of delivery. However, it can happen at other times in pregnancy as listed below:

- Vaginal Bleeding or injury/trauma to abdomen during pregnancy >10 weeks
- Miscarriage or Termination >10 weeks (if spontaneous or medically managed)
- Miscarriage or Termination any gestation (if surgically managed)
- Ectopic pregnancy at any gestation
- Suspected Molar pregnancy at any gestation

WHAT IS THE REACTION?

If any of the red blood cells from the D positive pregnancy mix with your D negative blood, your immune system may recognise the D protein on the surface of the D positive red cells as a 'foreign' substance and produce D antibodies.

Anti-D antibodies can cross from your blood into the fetal circulation and destroy the baby's red blood cells causing anaemia, jaundice and in severe cases brain damage or even death of the baby while in the womb or after delivery. This is called haemolytic disease in newborn (HDN).

The antibodies remain in your blood and they may also damage the red cells of a future baby, if they are Rh D Positive.

HDN can be prevented by receiving Anti-D immunoglobulin.

To reduce the possible effects of a sensitising event, it is crucial to report any events such as vaginal bleeding or abdominal injury to your health care professional as soon as possible. Anti-D Immunoglobulin should be given within 72 hours of a sensitising event, but doses given up to 10 days may still provide some protection.

WHAT IS ANTI-D IMMUNOGLOBULIN?

Anti-D immunoglobulin is a blood product made from the plasma of blood donors. Plasma is the liquid part of blood which fights infections.

Transmission of infection from anti-D injections has never occurred in the UK despite thousands of doses having been administered during pregnancy every year since the late 1960s. The possibility of a very small risk of infection from the plasma donors cannot however be completely ruled out.

HOW IS ANTI-D GIVEN AND ARE THERE ANY SIDE EFFECTS?

A trained healthcare professional will administer the injection with your consent, into the muscle in the upper arm. You may experience mild discomfort during and for a short time following the injection. This is completely normal and to be expected.

Uncommon side effects can include: a mild fever, headache or rash.

Very occasionally women can experience an allergic reaction to anti-D injections.

If it is your first anti-D injection, it is recommended you stay for 20 minutes post injection to ensure no adverse reactions occur.

If you require any further information or clarification of terminology, please do not hesitate to talk to one of the doctors or nurses, who will be happy to discuss your concerns with you.

THIS LEAFLET HAS BEEN MADE WITH INFROMATION FROM NHS UK & NHS BLOOD AND TRANSPLANT.

FURTHER INFROMATION AVAILABLE AT:

- https://www.nhs.uk/conditions/rhesus-disease/prevention/
- https://nhsbtdbe.blob.core.windows.net/umbraco-assets-corp/4401/inf1263.pdf