

Rhesus Negativity & Anti-D

There are several blood groups including A, B, AB and O. Also blood is either rhesus positive or rhesus negative (for example B+ or O-). The rhesus type you have is dependent on the blood group of both your parents. For this reason, children may have a different blood group to their parents.

What is Rhesus negativity?

When a woman who has rhesus negative blood carries a rhesus positive pregnancy, the blood cells from the foetus can enter her blood stream. This would normally only happen at the time of birth, or during an event such as a miscarriage or termination. Her immune system will treat the blood cells from the foetus as foreign and respond by making antibodies against them. The immune system has a good memory and this means that in future pregnancies, if the foetus is again rhesus positive, antibodies can be made which may cross the placenta and destroy the foetus' blood cells, causing serious complications such as severe anaemia.

What are Anti D injections?

By giving an injection of rhesus antibodies known as Anti-D, the woman's immune system is prevented from making antibodies against future pregnancies. The Anti D injection "mops up" antibodies which the woman may have already made. Women who are continuing with a pregnancy will have multiple injections of Anti D during her antenatal journey.

Do women undergoing abortion need to have Anti D injections in Australia?

Women who are undergoing surgical termination of pregnancy in Australia may be offered an injection of Anti D.

However, there is limited evidence to support the administration of Anti D to women undergoing medical termination of early pregnancy, especially as access to Anti D may be limited.

Several guidelines, including that produced by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, do NOT recommend anti D

administration to women undergoing medical termination of pregnancy under 9 weeks.

Note: This factsheet was written at the time of COVID 19 pandemic, and will be reviewed post pandemic.

When should Anti D be given?

Only women who are a rhesus negative blood group will receive an Anti-D injection. To be effective this must be given as soon as possible within 72 hours of a sensitising event, such as surgical termination of pregnancy, before the woman's immune system has the chance to make its own antibodies. Women who are continuing with a pregnancy will be advised by their obstetrician/midwife as to the timing of Anti D administration throughout the pregnancy.

Are there any risks?

Anti-D is made from the plasma (liquid part of blood) of carefully selected blood donors. In Australia, there has never been a confirmed case of transmission of viruses such as hepatitis B or C or HIV from Anti-D products supplied in Australia.

References;

RANZCOG guidance

<https://ranzocg.edu.au/news/covid-19-anti-d-and-abortion>

NICE guidance

<https://www.nice.org.uk/guidance/ng140/chapter/Recommendations#medical-abortion-up-to-and-including-100-weeks>

<https://www.nice.org.uk/guidance/ng140/evidence/c-antid-prophylaxis-for-women-up-to-136-weeks-gestation-pdf-6905052975>