NHS
Greater Glasgow and Clyde

CLINICAL GUIDELINE

Anti-D Immunoglobulin Administration, RhD Negative Women, Summary

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Lead Author:	Julie Murphy
Approval Group:	Maternity Clinical Governance Group

Important Note:

The online version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Anti-D Immunoglobulin Administration following potentially sensitising events in D Negative women - Summary

Gestation LESS than 12+0 weeks	
Samples required	Group and Save*
For the following PSEs (Appendix 1)	Administer **1500 IU** anti-D as soon as possible and always within 72 hours of event** Termination of pregnancy • Anti-D **NOT** required for women having a medical or surgical termination of pregnancy less than 12+0 weeks gestation. Ectopic pregnancy, miscarriage or molar pregnancy: • Anti-D required for women who have a surgical procedure to manage ectopic pregnancy, miscarriage or molar pregnancy. • Anti-D **NOT** required for women who receive solely medical management for miscarriage/ ectopic pregnancy. • Anti-D **NOT** required for threatened miscarriage or complete miscarriage or pregnancy of unknown location. Threatened miscarriage: • Consider anti-D Ig in non-sensitised D negative women if PV bleeding is recurrent, heavy and/or associated with severe abdominal pain
Gestation 12+0 to 19+6 weeks	
Samples required	Group and Save*
For any PSE (see Appendix 1)	Administer **1500 IU** anti-D as soon as possible and always within 72 hours of event** For continual uterine bleeding which is clinically judged to represent the same sensitising event, with no features suggestive of new presentation or significant change in pattern or severity of bleeding, minimum dose of 1500 IU anti-D given at 6 weekly intervals.
Gestation 20+0 weeks to term	
Samples required	Kleihauer Test and Group and Save*
For any PSE (see Appendix 1)	Administer **1500 IU** anti-D as soon as possible and always within 72 hours of event (Irrespective of whether RAADP given) ** As above for continual uterine bleeding but also must have 2 weekly Kleihauer testing.
Does the Kleihauer test indicate further anti-D is required (>12 mLs)?	Administer further anti-D following discussion with Blood Bank. Send follow up Kleihauer test after 72hrs of additional dose if given IM and 48hrs if IV until all fetal cells cleared
Routine antenatal anti-D Ig prophylaxis (RAADP)	
Samples required	Group and Save* - must be taken **prior** to anti-D administration Do not wait for results of Group and Save before administering anti-D
Administration of RAADP	Administer **1500 IU** anti-D at **28 – 30** weeks (**Irrespective** of whether anti-D has already been given for PSE)**
At time of loss, late miscarriage, termination or birth ≥ 20+0 weeks	
Samples required	Maternal samples - Kleihauer Test***, Group and Save* Cord samples - using the CHI generated for the fetus or baby, a newborn group would be requested If cord samples cannot be obtained, document on maternal request form and the neonatologist must be contacted to obtain a newborn group sample from the fetus or baby. Every effort should be made to obtain cord blood to avoid unnecessary invasive sampling of the fetus or baby.
Is the baby's group confirmed as D-positive?	Administer **1500 IU** anti-D within 72 hours of late miscarriage, termination or birth**
Does the Kleihauer Test indicate further anti-D required (>12 mLs)?	Administer further anti-D following discussion with Blood Bank. Send follow up Kleihauer test after 72hrs of additional dose if given IM and 48hrs if IV until all fetal cells cleared
Intrauterine death ≥ 20+0 weeks	

Samples required at diagnosis and following late miscarriage or birth	Kleihauer Test***, Group and Save*
Administration of anti-D at diagnosis and following late miscarriage or birth	Administer **1500 IU** anti-D at diagnosis unless women present in advanced labour Administer **1500 IU** anti-D within 72 hours of late miscarriage or birth** **Note:** Diagnosis AND delivery or birth of IUD are 2 separate sensitising events - anti-D should be given at diagnosis and a further dose given after delivery or birth, as there could be variable and significant delay between the two events****
Does the Kleihauer Test indicate further anti-D required (>12 mLs)?	Administer further anti-D following discussion with Blood Bank. Send follow up Kleihauer test after 72hrs of additional dose if given IM and 48hrs if IV until all fetal cells cleared

*Ensure that request form has full details of the PSE including gestation.

**Confirm correct product batch number/expiry date, IU dose and women's ID with the compatibility report. Document date and time given.

*** The Kleihauer sample should be taken when sufficient time has elapsed to allow fetal cells to be distributed within the maternal circulation following birth or manual removal of placenta. A period of 30-45 minutes is considered adequate

**** At point of diagnosis of IUD **≥** 20 weeks, Blood Bank would aim to process the request for anti-D request urgently upon receipt of a phone call about the woman

Other important points:

- Women who are confirmed to have immune (allo) anti-D do not require anti-D Ig
- Following PSE (see appendix 1), anti-D should be administered as soon as possible and always within 72 hours of the event. If this deadline has not been met some protection may be offered if anti-D is given up to 10 days after the sensitising event. After 10 days, discuss with Consultant Obstetrician
- Each new sensitising event should be managed with an appropriate additional dose of anti-D regardless of timing or dose of anti-D administered for a previous event
- RAADP is a separate entity and should be always be given between 28 -30 weeks, regardless of other doses given for PSE
- Cell Salvage guidance – a minimum dose of 1500 IU after reinfusion. Kleihauer test 30 -45 mins after reinfusion, may require further anti-D as per guidelines. **It is important that clinicians inform the transfusion lab if intra-operative cell salvage is being planned. An anti-D request should be submitted pre-operatively.**
- If the presence of **immune anti-D** is suspected by the Blood Bank this must be discussed with a Consultant Obstetrician to ensure appropriate follow-up
- Women who decline anti-D or were not given anti-D must be documented in BadgerNet and discussed with an Obstetric Consultant. Blood Bank should be informed that the dose of anti-D is no longer required.
- Women with anomalous or indeterminate D typing results should be treated as D negative until confirmatory testing is complete.

Appendix 1- Potentially sensitising events in pregnancy		
Evacuation of molar pregnancy	Vaginal bleeding with associated severe pain	Surgical management of ectopic pregnancy
Antepartum haemorrhage/ Uterine (PV) bleeding	Miscarriage, threatened miscarriage	Amniocentesis, chorionic villus biopsy and cordocentesis
External cephalic version	Intrauterine death and stillbirth	In-utero therapeutic interventions (transfusion, surgery, insertion of shunts, laser therapy for TTTS)
Abdominal trauma (sharp/blunt, open/closed, RTA)	Termination of pregnancy ≥ 12+0 weeks	All modes of birth
Cell Salvage	Abdominal Cerclage	Evacuation of retained products of conception (ERPC) / instrumentation of uterus/ Manual Vacuum Aspiration