No.3  Administration of Anti-D Immunoglobulin

1. Antenatal routine administration of anti-D for Rh negative women

The National Institute for Health & Clinical Excellence [NICE Aug 2008] has recommended that routine antenatal anti-D prophylaxis [RAADP] is offered to all non sensitised pregnant women who are Rh D negative at 28 weeks of pregnancy together with prophylaxis for potentially sensitising events in pregnancy. 1500 iu anti-D Immunoglobulin should be given by deep intramuscular (deltoid) injection.

N.B. This must to be issued from Blood bank on a named patient basis following confirmation of non-sensitised status.

2.5 Process for Selection and Care Planning of Women Receiving anti-D Immunoglobulin Prophylaxis

- Blood screening at booking to determine Rhesus status.
- Results from blood bank will be sent to relevant GP practice indicating women eligible for AADP and RAADP.
- Midwife will discuss AADP and RAADP at the next appointment and ask the women’s verbal consent for treatment with RAADP under patient’s group direction (PGD) by midwife without immediate involvement of the Doctor. Consent to treatment and consent to treatment under the PGD will recorded in the hand held maternity notes (see figure 1).
- Blood for antibody screening will be taken before administering RAADP at 28 weeks. Antibody screening at 34 weeks will be abandoned for women agreeing to RAADP.
- Blood transfusion department will inform the clinician if further prophylaxis is needed following AADP after 20 weeks.
- Clinicians will complete fully and return promptly the blood transfusion information sheet, which accompanies each sample.
- If routine anti-D prophylaxis is not given at 28 weeks, it can be given at any point up until delivery.

Figure1  Consent and record of administration sticker to be attached to patient maternity records

<table>
<thead>
<tr>
<th>Date:</th>
<th>Signature:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood group Rh D negative</td>
<td>yes  no</td>
</tr>
<tr>
<td>Discussion and leaflet given</td>
<td>yes  no</td>
</tr>
<tr>
<td>Please state if any contraindications:</td>
<td></td>
</tr>
<tr>
<td>Verbal consent given for RAADP</td>
<td>yes  no</td>
</tr>
<tr>
<td>28 weeks 1500iu anti-D immunoglobulin batch number ................. given IM</td>
<td></td>
</tr>
</tbody>
</table>
NICE prophylaxis is in addition to any that might be given for a sensitising event during pregnancy – see below.

2. Antenatal administration of anti-D where a sensitising event has occurred

2.1 Sensitising events
- Miscarriage
- Ectopic pregnancy
- Antepartum haemorrhage
- Intrauterine death
- Amniocentesis
- Chorionic villus sampling
- Abdominal trauma or fall
- External cephalic version
- Any other potentially sensitising event

A Kleihauer test will be performed on all cases where a potentially sensitising event has occurred at 12 weeks or more gestation, regardless of the cause.

Anti D should be administered to all patients >12 weeks, after a potentially sensitising event

For dose of anti-D to administer, please see section 2.6.

2.2 Administration of anti-D before 12 weeks gestation
AADP is not required for bleeding or miscarriage unless the patient is undergoing evacuation or bleeding is persistent and heavy. These women should be referred to Early Pregnancy Unit at Derriford Hospital Maternity Unit for further investigation and treatment.

2.3 Administration of anti-D after 12 weeks gestation
AAPD is required for non-sensitised RhD negative women ideally within 72 hours but up to 10 days following a sensitising event described below.

2.4 Exclusion criteria for anti-D administration
- Known allergy to anti-D Immunoglobulin and constitutions - Inform the lead professional and monitor blood samples for anti-D antibodies at 28 and 34 weeks.
- Woman already has anti-D antibodies - Inform the lead professional and monitor blood samples for anti-D antibodies at 28 and 34 weeks.
- Jehovah Witness - Some may not accept treatment, as the product anti-D is a human plasma-derived blood product is derived from human tissue - Inform the lead professional and monitor blood samples for anti-D antibodies at 28 and 34 weeks.
- Woman declines treatment - Inform the lead professional and monitor blood samples for anti-D antibodies at 28 and 34 weeks.
- IgA deficiency
- Disorders of haemostasis
- MMR vaccine may be given in the postpartum period with Anti-D as long as separate syringes and different limbs are used.
2.6 Dose of Anti-D Immunoglobulin in the antenatal period
Sensitising event at less than 12 weeks gestation:
in a non-viable pregnancy 250 iu anti-D Immunoglobulin
in a viable pregnancy 1500 iu anti-D Immunoglobulin
Sensitising event at 12 weeks or more gestation:
500 iu anti-D Immunoglobulin

2.7 Repeat of sensitising event or sensitising event occurs within 6 weeks of routine prophylactic anti-D
Repeat Kleihauer and give anti-D if required and as directed by blood bank.

3. Postnatal routine administration of anti-D for Rh negative women

3.1 Samples required
Maternal and cord bloods should be taken following delivery in order to determine the need for the administration of Anti-D Immunoglobulin

- Maternal Cord:
  - Clotted (pink)
  - Clotted (pink)
  - purple for FBC
  - yellow for SBR

All cord samples MUST be labelled with infant hospital no.

3.2 Dose of Anti-D Immunoglobulin in the postnatal period
Non-sensitised Rh-D negative women having given birth to an Rh positive baby should be given 500iu anti-D Immunoglobulin within 72 hours of delivery. NB if more than 72 hours has passed anti-D should be given as there may be some benefit for up to 10 days from exposure (RCOG, 1999)

3.3 If a woman insists on going home before the Anti-D is available, alternative arrangements MUST be made.

3.3.1 Administration in community
- The community midwife must be informed
- If possible the community midwife will collect Anti-D from the ward or lab and administer it in an environment where there is access to emergency resuscitation equipment, i.e. GP surgery. It must not be administered in the patient’s home.
- The women must be asked to retain her IDENTITY BRACELET for identification / checking purposes.

3.3.2 Administration in hospital
If the woman wishes to return to the ward for administration - the midwife must
- Discuss arrangements for return to ward.
- Explain the importance of timely administration of Anti-D.
- Ask her to retain her ID BRACELET.
- Ask her to bring her MIDWIFERY CARE PLAN back with her.
- Keep OBSTETRIC NOTES available on WARD until Anti-D has been given and notes completed.
- Ensure midwives on duty at the time due to return are aware of plans.
- On return, complete checking and administration procedures (PHT 1998).
- Failure of woman to attend must prompt follow-up either by telephone or visit by
4. Record Keeping

It is expected that every episode of care be recorded clearly, in chronological order and as contemporaneously as possible by all healthcare professionals as per Hospital Trust Policy. This is in keeping with standards set by professional colleges, i.e. NMC and RCOG.
All entries must have the date and time together with signature and printed name.
Monitoring and Audit

Audit Standards:

Please refer to audit tool, location: 'Maternity on cl2-file11’, Guidelines

Reports to:
Clinical Effectiveness Committee – responsible for action plan and implementation of recommendations from audit

Frequency of audit:
Annual

Responsible person:
DAW midwife / SHO

Cross references

Antenatal guideline 31: Maternity Hand Held Notes, Hospital Records and Record keeping
Antenatal Guideline 34 – Referral to ECV clinic
Antenatal Guideline 44 – Guideline Development within the Maternity Services

Maternity services Patient Group Directives

References


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Version
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Changes
Section 2.1 - Kleihauer performed from 12 weeks instead of 20
Section 2.6 - Administration of anti-D given from 12 weeks instead of 14 weeks
Section 2.6 – Anti D dose changed to 500 iu for sensitising event
Section 3.2 - Non-sensitised Rh-D negative women having given birth to an Rh positive baby should be given 500iu anti-D Immunoglobulin within 72 hours of delivery.

Date Ratified
Sep 13

Valid Until Date
Sep 16