Anti D administration in pregnancy

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1. Introduction

All Rh (D) negative women who carry a Rh (D) positive fetus are at risk of being sensitised to produce immune anti-D following a feto-maternal haemorrhage (FMH). This can cause haemolytic disease of the fetus and newborn (HDFN). In order to help prevent this, an injection of anti-D immunoglobulin is offered following potentially sensitising events during pregnancy, prophylactically at 28 – 30 weeks gestation and within 72 hours of birth to women with a Rh (D) negative blood group where the baby has been identified as Rh (D) positive.

Identification of women with a Rh (D) negative blood group is done in early pregnancy – the community midwife will discuss the rationale for screening with the woman at the booking appointment and gain consent for the test.
The test will be performed at the dating scan appointment along with the other booking bloods.

The community midwife is responsible for checking the blood results and communicating them to the woman – if the woman is identified as having a Rh (D) negative blood group then this should be discussed and the relevant leaflet given (see appendix), an appointment should then be booked for 28-30 weeks for RAADP (routine anti-D prophylaxis) with the woman's consent and she should be informed to contact maternity services after any potentially sensitising events.

Following birth, maternal and cord blood samples should be taken and sent to blood bank for fetal Rh (D) typing. Anti-D should be offered to all non-sensitised women with a Rh (D) negative blood group if the baby is identified as being Rh (D) positive. At least 500iu is to be given within 72 hours.

RCOG recommends the use of the following guideline,
British Committee for Standards in Haematology (BCSH) guideline on anti-D administration in pregnancy. This should be used in conjunction with this local policy.

1.2 Partner testing

Following an informed discussion with the community midwife about Anti- D, women may have concerns around receiving it as it is a blood product. Consideration should be given to offer the woman partner testing to determine the blood group of the **biological** father. This discussion should be documented and if her partner requests blood group testing this should be provided. The community midwife should search WPAS for the partner's hospital number - if there is no hospital record, a new hospital number must be created. Document maternal details in the comments box on the paternal blood group request form so the blood group results can be matched up. Once the results are received, the paternal blood tests result and follow up arrangements should be documented on the maternal WPAS record and in the handheld notes and the decision to accept or decline Anti-D clearly stated.

2. Management of Administration

2.1 Before 12 weeks

Please discuss with Gynae/EPU

2.2 Between 12 – 20 weeks

Confirmed miscarriage – anti-D immunoglobulin should be given to all non-sensitised women with a Rh (D) negative blood group who have had a complete miscarriage after 12 weeks gestation

Threatened miscarriage – anti-D immunoglobulin should be given to all non-sensitised women with a Rh (D) negative blood group in the case of threatened miscarriage after 12 weeks.

Other indications include:

- Therapeutic abortion
- Amniocentesis and CVS
- Abdominal trauma.

Prior to 20 weeks gestation – the recommended dose of anti-D is 250iu and Kleihauer test is not indicated. However, if 250iu is not available, 500iu is to be used instead.

Please note: BCSH states that Rh(D) negative women presenting with continual uterine bleeding between 12 and 20 weeks gestation should be given at least 250 IU anti-D Ig, at a minimum of 6 weekly intervals.

Please discuss with obstetrics/gynaecology team to create a management plan and consult BCSH guideline below.

(Information taken directly from British Committee for Standards in Haematology (BCSH) guideline on anti-D administration in pregnancy.)

2.3 After 20 weeks

Indications:

- Antepartum haemorrhage
- Amniocentesis/CVS
- ECV
- Abdominal trauma/injury
- Stillbirth.

After 20 weeks gestation the usual dose is 500iu but a Kleihauer test, along with blood group and antibody screen, will be required prior to administration to assess the FMH level and ensure the correct quantification of anti-D is administered. This is usually done in AAU.

This process should be followed for all potentially sensitising events regardless of timing of previous dose.

Please note: The following information has been taken directly from British Committee for Standards in Haematology (BCSH) guideline on anti-D administration in pregnancy and must be discussed with obstetric team to create a management plan.

In the event of continual uterine bleeding which is clinically judged to represent the same sensitising event, with no features suggestive of a new presentation or a significant change in the pattern or severity of bleeding, such as the presence of abdominal pain or another clinical presentation, a minimum dose of 500 IU anti-D Ig should be given at six weekly intervals.

Please see British Committee for Standards in Haematology (BCSH) guideline on anti-D administration in pregnancy for more information and full guidance on continual bleeding prior to offering this to women.

2.4 28 week prophylaxis

Routine anti-D prophylaxis (RAADP) is 1500iu of anti-D immunoglobulin offered to all non-sensitised women with a Rh (D) negative blood group between 28 and 30 weeks gestation. If this is declined it should be clearly documented in the handheld maternity notes and 28 week blood group and antibody screen will still be required.

This appointment is carried out in Antenatal clinic and women should remain in the department for 20 minutes following administration to ensure there is no adverse reaction.

Women must have their 28 week blood group and antibody screen performed prior to the administration of anti-D and all previous doses of anti-D need to be indicated on the blood form.

PLEASE NOTE: Routine prophylaxis should be given regardless of any administration of Anti-D for sensitising events.

2.5 Postpartum administration

Anti-D immunoglobulin is offered to all non-sensitised women with a Rh (D) negative blood group whose baby is Rh (D) positive. A kleihauer test should be performed at least 30 minutes after birth but before 2 hours to ensure the FMH levels are correct.

2 maternal blood samples are required for Kleihauer testing and must be accompanied by a sample of cord blood – if the infant is Rh (D) negative then anti-D will not be required. If the baby has a Rh (D) positive blood group then postnatal anti-D should be offered and administered within 72 hours.

Any exceptions to this guideline should be incident reported.

Appendix 1: Flowchart for RAADP (Routine Anti-D Prophylaxis)

FIRST POINT OF CONTACT

- Woman given ASW pack and advised to read the information prior to the booking appointment

BOOKING APPOINTMENT

- Screening tests discussed by community midwife
- Consent gained for blood group and antibody screen
- Blood forms completed
- Woman to await dating USS (To be seen in relevant department if any concerns)

DATING USS

- Routine screening bloods taken on day of scan – including blood group and antibody screen

16/40 COMMUNITY MIDWIFE APPOINTMENT

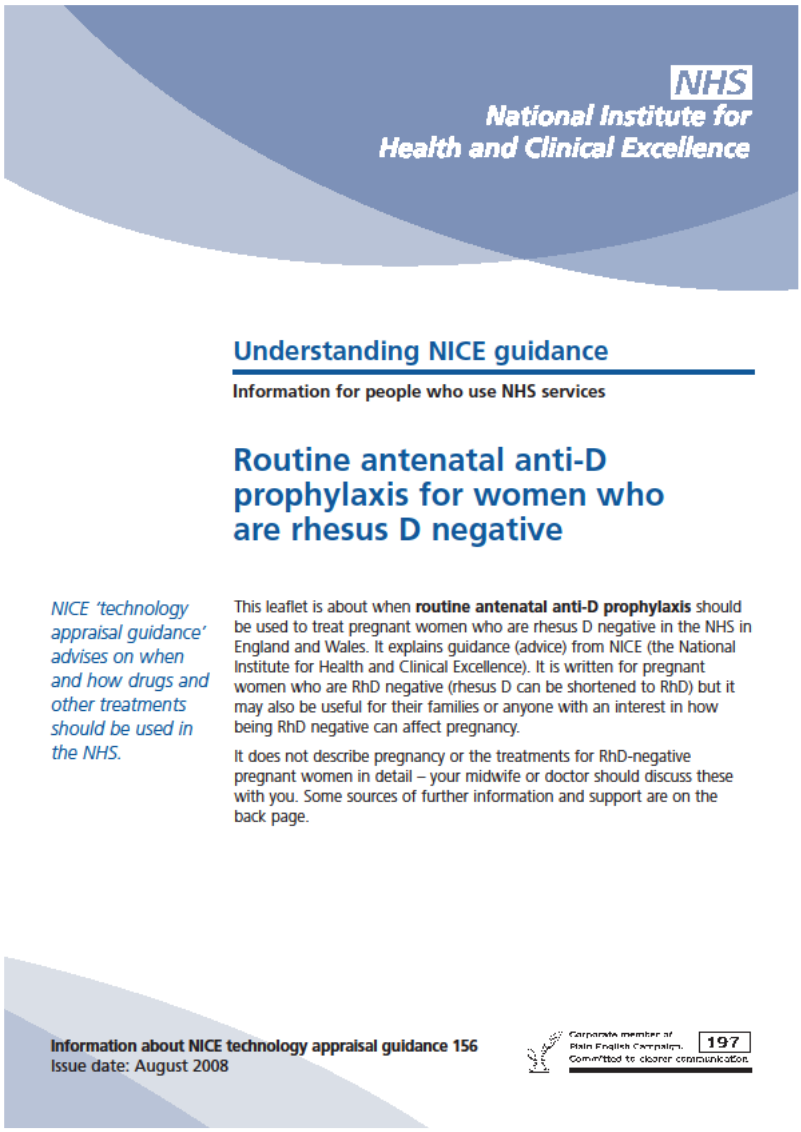
- Results checked prior to this appointment
- Communicated to women and if Rh (D) negative, give relevant leaflet
- Discuss blood group and the need for RAADP and anti-D following potentially sensitising events (PSE)
- Ensure woman has relevant contact numbers
- Contact ANC and book RAADP for 28-30 weeks gestation

28/40 RAADP APPOINTMENT

- Attend ANC and have 28 week bloods taken – blood group and antibody screen must be taken prior to administration of RAADP
- Antenatal clinic midwife to check previous antibody results prior to administering anti-D
- If immune anti-D present then RAADP is not given – ensure appropriate management plan is in place and discuss with on-call doctor if unsure.
- Ensure women understands RAADP, give information leaflet and gain consent
- Administer 1500iu anti-D immunoglobulin and ensure women stays in clinic for 20 minutes
- Inform woman that further anti-D will be needed in the case of any potentially sensitising events (PSE).
- Ensure sticker is placed into maternity notes and administration clearly documented.
- Return blood bank documentation to blood bank
- Continue with care as planned

Appendix 2: Understanding NICE guidance: Routine antenatal anti-D prophylaxis for women who are rhesus D negative

Please click document below to open and print



NHS
National Institute for Health and Clinical Excellence

Understanding NICE guidance

Information for people who use NHS services

Routine antenatal anti-D prophylaxis for women who are rhesus D negative

NICE 'technology appraisal guidance' advises on when and how drugs and other treatments should be used in the NHS.

This leaflet is about when **routine antenatal anti-D prophylaxis** should be used to treat pregnant women who are rhesus D negative in the NHS in England and Wales. It explains guidance (advice) from NICE (the National Institute for Health and Clinical Excellence). It is written for pregnant women who are RhD negative (rhesus D can be shortened to RhD) but it may also be useful for their families or anyone with an interest in how being RhD negative can affect pregnancy.

It does not describe pregnancy or the treatments for RhD-negative pregnant women in detail – your midwife or doctor should discuss these with you. Some sources of further information and support are on the back page.

Information about NICE technology appraisal guidance 156
Issue date: August 2008

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Maternity Services

Checklist for Clinical Guidelines being Submitted for Approval

Title of Guideline:	Anti D administration in pregnancy
Name(s) of Author:	Katie Donovan
Chair of Group or Committee approving submission:	Antenatal Forum
Brief outline giving reasons for document being submitted for ratification	
Details of persons included in consultation process:	
Name of Pharmacist (mandatory if drugs involved):	
Issue / Version No:	
Please list any policies/guidelines this document will supercede:	
Date approved by Group:	January 2021
Next Review / Guideline Expiry:	January 2024
Please indicate key words you wish to be linked to document	Anti–D, prophylaxis, rhesus negative
File Name: Used to locate where file is stores on hard drive	