



C-Obs 6

Guidelines for the use of Rh (D) Immunoglobulin (Anti-D) in obstetrics in Australia

Fellows are recommended to view ***Guidelines on the prophylactic use of Rh (D) immunoglobulin (Anti-D) in obstetrics*** http://www.nba.gov.au/PDF/glines_anti_d.pdf.

This document, produced by the National Blood Authority and approved by the National Health and Medical Research Council (NHMRC), updates previous guidelines on the use of Rh (D) immunoglobulin (Anti-D) released in 1999. It aims to inform clinicians, other health professionals and policy makers about the revised recommendations for use of Anti-D in Australia. Hard copies of the Guidelines are obtainable from the National Blood Authority.

In addition, the Royal Australian and New Zealand College of Obstetricians and Gynaecologists has prepared *Frequently asked Clinical Questions about the use of Rh (D) immunoglobulin*, available at <http://www.transfusion.com.au/FILES/RhD/ranzcogclinical.pdf>.

Overview

The administration of Rh (D) Immunoglobulin (Anti-D) has been shown previously (and more recently in Cochrane Reviews [1,2]) to result in a significant reduction in the incidence of Rh isoimmunisation. In 1999 the NHMRC recommended prophylactic administration (3) of Anti-D during pregnancy. However due to constraints on supply of the Australian product, from CSL Ltd, the implementation of this recommendation was deferred until November 2002.

Product use

National supplies of Anti-D are now adequate and the recommendation of the NHMRC from the 1999 guidelines can now be put into effect, as recommended by the Chief Medical Officer of the Commonwealth of Australia (4,5).

By March 31 2006, the Australian Red Cross Blood Service (ARCBS) will cease to issue WinRho SDF™. Imported product will only be issued when access to intravenous preparation is warranted.

The method of implementation as recommended is as follows:

All Rh (D) negative women (who have not actively formed their own Anti-D) should be offered Anti-D:

- a) First trimester indications - CSL 250 IU (50mcg)
 - i) Chorionic Villus Sampling
 - ii) Miscarriage
 - iii) Termination of pregnancy
 - iv) Ectopic pregnancy

There is insufficient evidence to suggest that a threatened miscarriage before 12 weeks gestation necessitates Anti-D.

- b) Second and third trimester indications - CSL 625 IU (125mcg)
 - i) Obstetric haemorrhage
 - ii) Amniocentesis, cordocentesis
 - iii) External cephalic version of a breech presentation, whether successful or not
 - iv) Abdominal trauma, or any other suspected intra-uterine bleeding or sensitising event

- c) All Rh (D) negative women (who have not actively formed their own Anti-D) at approximately 28 weeks gestation and again at approximately 34 weeks gestation.

- CSL 625 IU (125mcg)

- d) Post-natally, within 72 hours. All women who deliver an Rh (D) positive baby should have quantification of feto-maternal haemorrhage to guide appropriate prophylaxis.

Rh antibody testing and assessing magnitude of feto-maternal haemorrhage

Blood should be taken for Rh antibody titre prior to administration of Anti-D, in order to detect those who have already become immunised. However, at 34 weeks gestation, the test may be omitted if prophylactic Anti-D was given at 28 weeks gestation.

Rh (D) immunoglobulin should not be given to women with preformed Anti-D antibodies except where the preformed Anti-D is due to the antenatal administration of Rh (D) immunoglobulin. If it is unsure whether the Anti-D detected in the mother's blood is passive or preformed, the treating clinician should be consulted. If there is continuing doubt, Rh (D) immunoglobulin should be administered.

All women as defined in paragraphs (2b) and (2d) should have the magnitude of potential feto-maternal haemorrhage assessed and if necessary further Anti-D administered as appropriate.

Evidence of benefit

Reviews in the Cochrane Library , Level 1, and undertaken by The National Institute for Clinical Excellence (NICE) (6) , Level II and III, indicate that antenatal administration of Anti-D can result in a reduction in alloimmunisation of 78% (Cochrane Library, Level I evidence – 2 studies of 4500 women, both Level II) and 70% (NICE, Level II/III evidence – 4 studies of 6400 women, 1 Level II and 3 Level III).

Overall a policy of Anti-D administration at 28 and 34 weeks during pregnancy to all Rh (D) negative women (who have not actively formed their own Anti-D) will result in a reduction of alloimmunisation from about 1% to 0.3%.

References

- 1 Crowther CA. Anti-D administration in pregnancy for preventing Rhesus alloimmunisation (Cochrane Review, 1999). In: *The Cochrane Library*, Issue 1 2003
- 2 Crowther C, Middleton P. Anti-D administration after childbirth for preventing Rhesus alloimmunisation (Cochrane Review, 1997). In: *The Cochrane Library*, Issue 1 2003
- 3 Guidelines on the Prophylactic Use of Rh (D) Immunoglobulin in Obstetrics. *National Health and Medical Research Council*, 1999

- 4 Letter from Commonwealth of Australia, Chief Medical Officer, Professor Richard Smallwood AO, to the Product User re Rh (D) Immunoglobulin (Anti-D) in Obstetrics, 4 November 2002
5. Personal communication from the Chairman, Working Party on the Use of Anti-D Immunoglobulin in Obstetrics, 18 February 2002
6. Guidance on the use of routine antenatal Anti-D prophylaxis for Rh (D) negative women. (2002) *National Institute for Clinical Excellence*, Technical Appraisal Guidance No. 41, <http://guidance.nice.org.uk/TA41/guidance/pdf/English>

Useful websites

NHMRC website publications: *Guidelines on the prophylactic use of Rh D immunoglobulin (Anti-D) in obstetrics* (2003) <http://www.nhmrc.gov.au/publications/synopses/wh33syn.htm>

National Blood Authority website <http://www.nba.gov.au>

Australian Red Cross Blood Service (ARCBS)

To assist health professionals with the implementation of the new arrangements for antenatal prophylaxis, ARCBS and CSL Bioplasma have produced a range of educational materials that can be requested by faxing the CSL Immunotherapy Product Manager on 03 9358 5410, or visit the ARCBS website <http://www.arcbs.redcross.org.au/>

ARCBS Stage 3 of the Rh (D) Antenatal Prophylaxis Program (2006)
<http://www.transfusion.com.au/Rhd/>

Links to other related College Statements

[C-Gen 2 Guidelines for consent and the provision of information regarding proposed treatment](#)

Disclaimer

This College Statement is intended to provide general advice to Practitioners. The statement should never be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of each patient.

The statement has been prepared having regard to general circumstances. It is the responsibility of each Practitioner to have regard to the particular circumstances of each case, and the application of this statement in each case. In particular, clinical management must always be responsive to the needs of the individual patient and the particular circumstances of each case.

This College statement has been prepared having regard to the information available at the time of its preparation, and each Practitioner must have regard to relevant information, research or material which may have been published or become available subsequently.

Whilst the College endeavours to ensure that College statements are accurate and current at the time of their preparation, it takes no responsibility for matters arising from changed circumstances or information or material that may have become available after the date of the statements.