Primary treatment for Isoimmune Haemolytic jaundice is intensive phototherapy. IVIg has been shown to reduce the need for exchange transfusion (ET) in Rhesus and ABO haemolytic disease. IVIg should be considered when the total serum bilirubin levels is 35 to 50 µmol/L below ET level or continuing to rise at 8-17 µmol/L/hour despite intensive phototherapy.

IVIG may also decrease the mean number of ETs per infant, decrease the duration of phototherapy and hospital stay but does not always prevent the need for ET.

Efficacy of IVIg is not conclusive in Rh haemolytic disease of the newborn, the studies with low risk of bias indicating no benefit and studies with high risk of bias suggesting benefit. Role of IVIg in ABO disease is not clear as studies that showed a benefit had high risk of bias.

**Indication**

- Rh and ABO incompatibility.
- Not indicated unless Direct Antibody Test (DAT) is positive.
- Other isoimmune haemolytic disease (no systematic reviews available).
- Difficulties in obtaining appropriate blood for ET or parental refusal for ET.
- Do not give if exchange transfusion imminent.

**Mechanism of Action**

Thought to act by blocking the Fc receptors in reticuloendothelial system thus preventing them from taking up and lysing antibody coated RBCs. May also increase rate of IgG catabolism and decrease circulating autoantibody.

**Side Effects**

Possible side effects are similar to blood transfusions. Fever, allergic reactions, haemolysis, fluid overload, anaphylaxis (reported in IgA deficiency) and possible disease transmission. Systematic reviews did not reveal any adverse reactions in neonates receiving IVIg.

**Dose and Administration**

**Privigen 10%** (Immunoglobulin IgG) from pooled human plasma

Presentation: 5g in 50mL vial.

- 1g/kg as an Intravenous infusion over 4 hours.
Jaundice: Immunoglobulin Infusion (IVlg) in Isoimmune Haemolytic Jaundice

Refer to Transfusion Medicine Protocol - Privigen® Intravenous Immunoglobulin

Should be used only at consultant’s advice and ordered on a named patient basis only. As with all blood products, parental consent is to be obtained before administration.

Contact WNHS Haematology for supply of Privigen 10%.

**Monitoring and Documentation**

- Observations and documentation as per blood product administration.

**NOTE:** Privigen is sourced from European & USA remunerated and non-remunerated donors. Other immunoglobulin products (eg Flebogamma) should not be used in neonates, because of the possibility of undiagnosed hereditary fructose intolerance.

Dosages should be rounded up or down to whole vials and we should not require more than 1 x 50 mL vial (5g) per dose. Privigen 10% is administered through a standard IV infusion set. An in line 170-200 micron filter is NOT required.

**References**


**Related WNHS policies, procedures and guidelines**

Transfusion Medicine Protocol - Privigen® Intravenous Immunoglobulin

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