Final

Human Immunoglobulin IVIG (for intravenous use)

ACTION and USES

Immunoglobulin is useful in some cases of Haemolytic Disease of the Newborn, particularly Rh Disease. Its mechanism of action is not clear, but consensus opinion suggests that it swamps the infant's reticuloendothelial system with infused antibodies, thereby reducing presentation of red cells for destruction. It thus has the potential to inhibit the fall in haemoglobin and rise in bilirubin, reducing the number of exchange transfusions.

Immunoglobulin may also be useful in the management of alloimmune thrombocytopenia.

DOSAGE

Only prescribe IVIG following discussion with consultant

INDICATION	DOSE	FREQUENCY
Haemolytic disease of the newborn	500mg/kg	ONCE only Can be repeated after 48 hours according to response
Idiopathic thrombocytopaenia purpura	400mg/kg - 1g/kg	ONCE only Can be repeated for up to 5 days according to response (maximum total dose 1-2g/kg)
Alloimmune Neonatal Thrombocytopenia	400mg/kg – 1g/kg	ONCE only Can be repeated daily for up to three days according to response

500mg/kg (5ml/kg of 100mg/ml) given by single intravenous infusion over 4 hours.

ADMINISTRATION

To be given by intravenous infusion at a rate of 1.2 ml/kg/hour of the 100mg/ml solution. See monitoring section, as the rate of infusion may need to decrease.

As this is a pooled human blood product; it is essential that the batch number(s) is recorded in the clinical records.

RECONSTITUTION

Human Immunoglobulin is available as a ready to administer solution containing 100mg/ml in 5g or 10mg vial, which, is available from pharmacy (Only 5g vials available from the Hospital At Night (HAN) team out of hours).

Ordering

Ordered on the Immunoglobulin Adult Request Form available at http://intranet.lothian.scot.nhs.uk/Directory/Haematology/chemo/Documents/IVIg%20Pharmacy%20Request%20Form.pdf

Print Pages 1 and 2, complete all relevant sections and send to pharmacy for supplies

INCOMPATIBILITIES

Should not be mixed or infused with other blood products or medicinal products.

STORAGE

Store in the refrigerator. For single use only any unused portion should be discarded.

MONITORING

Adverse effects are related to rate of infusion. Do not exceed the rate of infusion rate of 1.2ml/kg/hour of a 100mg/ml solution. The newborn should be observed for fever, tachycardia, and hypotension. If any of these occur stop the infusion, inform medical staff and wait until the adverse effects have passed. The infusion may need to be re-prescribed at a slower rate starting at 75% of the original and reducing further to 50% if side effects continue.

Haemolytic anaemia, volume overload, irritation at cannula site and hypersensitivity reactions can also occur (i.e. rashes including urticaria).

Live attenuated vaccines may not be fully effective if given within 3 months of administration of IVIG. IVIG may lead to positive results on serological testing performed after administering it. As well, passive transmission of antibodies to erythrocyte antigens (A,B,D) may interfere with some serological tests for red cell antibodies (e.g. Coombs Test).