Clinical Guideline
Immunoglobulin

Policy developed by: SA Maternal, Neonatal & gynaecology Community of Practice
Approved SA Health Safety & Quality Strategic Governance Committee on: 9 November 2017
Next review due: 9 November 2020

Summary
The purpose of this guideline is to guide nursing, medical and pharmacy staff in the dosing and administration of immunoglobulin (Intragam 10%)

Keywords
Immunoglobulin, intragam 10%, intragam, neonatal medication guideline, human normal immunoglobulin, gamma globulin, IVIG, IGIV, neonatal alloimmune thrombocytopenia, haemochromatosis, haemolytic disease of the newborn, blood

Policy history
Is this a new policy? N
Does this policy amend or update an existing policy? Y v1.0
Does this policy replace an existing policy? N
If so, which policies?

Applies to
All SA Health Portfolio
All Department for Health and Ageing Divisions
All Health Networks
CALHN, SALHN, NALHN, CHSALHN, WCHN, SAAS

Staff impact
All Clinical, Medical, Midwifery, Nursing, Students, Allied Health, Emergency, Mental Health, Pathology, Pharmacy

PDS reference CG272

Version control and change history

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Note

This guideline provides advice of a general nature. This statewide guideline has been prepared to promote and facilitate standardisation and consistency of practice, using a multidisciplinary approach. The guideline is based on a review of published evidence and expert opinion.

Information in this statewide guideline is current at the time of publication.

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Health practitioners in the South Australian public health sector are expected to review specific details of each patient and professionally assess the applicability of the relevant guideline to that clinical situation.

If for good clinical reasons, a decision is made to depart from the guideline, the responsible clinician must document in the patient’s medical record, the decision made, by whom, and detailed reasons for the departure from the guideline.

This statewide guideline does not address all the elements of clinical practice and assumes that the individual clinicians are responsible for discussing care with consumers in an environment that is culturally appropriate and which enables respectful confidential discussion. This includes:

- The use of interpreter services where necessary,
- Advising consumers of their choice and ensuring informed consent is obtained,
- Providing care within scope of practice, meeting all legislative requirements and maintaining standards of professional conduct, and
- Documenting all care in accordance with mandatory and local requirements.

Synonyms

Human normal immunoglobulin, Gamma globulin, IVIG, IGIV.

This guideline should be used in conjunction with the Intragam 10% Bloodsafe Guide to Administration

Dose and Indications

1g= 1000mg

Neonatal alloimmune thrombocytopenia and haemochromatosis

Intravenous Infusion

1g/kg as a single dose. Repeat in 24 hours if required

Always contact Haematology for advice.

Haemolytic disease of the newborn

Intravenous Infusion

500mg/kg to 1g/kg, repeat in 12 hours if required
Intravenous Infusion

Start slowly, increase rate only if tolerated;

- First 30 minutes 0.5mL/kg/hour (equivalent to 50mg/kg/hr)
- Next 30 minutes 1mL/kg/hour (equivalent to 100mg/kg/hour)
- Thereafter 2mL/kg/hr (equivalent to 200mg/kg/hour)

Do not mix or piggy back with other medications or intravenous fluids. Flush before and after with sodium chloride 0.9%.

Compatible Fluids

Sodium chloride 0.9% for intravenous flush only

Diluting immunoglobulin is not recommended

Adverse Effects

Infusion related side effects include hypotension, tachycardia and flushing.

Infrequent

Muscle spasms, arthralgia, fever

Rare

Anaphylaxis, acute renal failure, aseptic meningitis syndrome, transfusion related acute injury, thrombosis

Monitoring

- Baseline pulse rate and blood pressure, at 30 minutes then at one hour (at each rate increase), then every hour, on completion and 1 hour post infusion
- Infusion site for phlebitis at 30 minutes then at one hour then every hour until completion
- Observe for infusion related side effects (hypotension, tachycardia and flushing)
- If infusion related side effects occur, the infusion should be stopped then recommenced at a slower rate
- Baseline full blood count, renal function and urine output
Practice Points

- Immunoglobulin is available through the blood transfusion service. All Immunoglobulin needs approval through Bloodstar - https://www.blood.gov.au/bloodstar
- Intravenous immunoglobulin does not require a filter.
- Correct risk factors for adverse reactions eg dehydration prior to administration
- The maltose present in Intragam P may interfere with some blood glucose measurements, resulting in the overestimation of blood glucose results. If this glucose measurement is used to guide treatment, hypoglycaemia may occur.
- The risk of necrotising enterocolitis may be increased in late preterm infants treated for isoimmune haemolytic jaundice \(^1\) Use with caution.

References

1. Figueras-Aloy J et al, Intravenous Immunoglobulin and Necrotizing Enterocolitis in Newborns With Hemolytic Disease, Pediatrics Jan 2010, 125 (1) 139-144;

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**PDS reference:** OCE use only

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