Post-transfusion purpura (PTP)

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Condition for which IVIg has an emerging therapeutic role.

Specific Conditions	• Post-tranfusion purpura
Indication for IVIg Use	• PTP or suspected PTP with thrombocytopenia associated with life-threatening bleeding.
Level of Evidence	Insufficient data (Category 4a)
Description and Diagnostic Criteria	PTP is caused by antibodies to platelet-specific antigens, usually anti-HPA1a. PTP may result in profound thrombocytopenia with associated life-threatening bleeding. While the platelet count typically recovers spontaneously, this can take several weeks or more. Specialised investigations (antibody screening, patient/donor genotyping) and antigen-matched platelet and/or red cell transfusion support may be required. Contact the Blood Service for more information.
Justification for Evidence Category	Mueller-Eckhardt and Kiefel (1988) evaluated the effect of high-dose immunoglobulin G (HDIgG) in 11 PTP cases investigated in one institution, and summarised clinical data on eight additional reported cases. Of 17 cases, 16 had good or excellent response to HDIgG, attaining normal platelet counts within a few days; only one failure was observed. Five patients relapsed, but attained complete remission after a second course (dose) of IgG. Total IgG doses per course were in the range of 52–180 g. Five different IgG preparations were used and seemed similarly effective. No adverse reactions were observed. The authors conclude that HDIgG is the treatment of choice for PTP.
Qualifying Criteria for IVIg Therapy	• Clinical diagnosis or suspicion of PTP with profound thrombocytopenia. AND • A risk of life-threatening bleeding. Laboratory confirmation is desirable, where possible in the time frame (usually an urgent, life-threatening clinical situation).
Review Criteria for Assessing the Effectiveness of IVIg Use	Review is not mandated for this indication however the following criteria may be useful in assessing the effectiveness of therapy. Clinical effectiveness of Ig therapy may be demonstrated by: • Platelet counts in the days and weeks following Ig therapy. AND • Reduction in, or resolution of active bleeding.

Dose	
	• **Dose** - 1 g/kg as a total dose, repeated if necessary. **The aim should be to use the lowest dose possible that achieves the appropriate clinical outcome for each patient.** **Refer to the current product information sheet for further information.**

Bibliography

Gonzalez, CE & Pengetze, YM 2005, 'Post-transfusion purpura', *Current Haematology Reports*, vol. 4, no. 2, pp. 154–9.

Mueller-Eckhardt, C & Kiefel, V 1988, 'High-dose IgG for post-transfusion purpura — revisited', *Blut*, vol. 57, no. 4, pp. 163–7.

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