



Newsletter Spring 2022 edition 12

Welcome to the first LoPAG Newsletter of 2022

This year LoPAG is releasing a series of Education newsletters. These are intended to be used as helpful guides to appropriate platelet use. Please print them, and discuss them among colleagues.



Allergic Reactions to components, and who gets what platelet Component!

Allergic reactions to blood components are a common occurrence, which is why every Trust should have a pathway within their transfusion reaction policy explaining what to do to treat the immediate reaction, and what is required for further transfusion support. This Article is not about diagnosing reactions but what to do after a reaction has been investigated and deemed to be allergic in origin.

The BSH splits allergic reactions into those which are IgA deficiency linked, and those which are not. The ongoing transfusion support for these patients differs slightly.

Immunoglobulin A (IgA) deficiency is relatively common, occurring in approximately 1:700 individuals. Severe allergic reactions to blood components have been documented in patients with IgA deficiencies. These instances increase in those who develop IgA antibodies also.

NHSBT manufacture a very limited supply of blood components from IgA deficient donors to support patients who have severe reactions to standard components due to this deficiency.

Washed Platelets or platelets suspended in additive solution (PAS), to give them their official title, are manufactured from apheresis platelets to contain one adult therapeutic dose of platelets, minimal donor plasma and 200 mL of PAS.

As platelets in PAS have a shelf life of only 24 hours they are manufactured to order.

Both IgA deficient and washed platelets should only be given in the specific circumstance of bleeding or prophylaxis in a patient who has a history of recurrent, **severe**, allergic reactions to plasma-containing components. As these components can't just be 'grabbed off the shelf' the next page goes through the BSH guidance on the correct platelet product to order for patients who have had none, one or more allergic transfusion reactions.

See the [SHOT webinar page](#) for further education on the immediate treatment and diagnosis of transfusion reactions

Save the date – LoPAG education event 12/05/2022

Allergic Reactions, and who gets what platelet component!

First time transfusions for patients already identified as IgA deficient (An IgA serum level of less than 0.07 g/L (in patients above 4 years of age), in whom other causes of hypogammaglobulinemia have been excluded)	Patients should be treated on a case by case basis- standard components may be suitable.
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Patients who are IgA deficient but have never had a reaction to a blood transfusion – should be assessed by Haematology/immunology on a case by case basis. Most IgA deficient patients can receive standard components without any problems
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Mild allergic Reactions	Continue to order standard blood components that meet your patients requirements. <i>NHSBT might suggest a trial of pooled platelets over apheresis as the plasma content is lower in pooled platelets</i>
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Repeated mild reactions may warrant further investigations to rule out IgA deficiency.
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If after investigation a patient is deemed to have had a mild allergic reaction then further transfusions should take place in a setting able to deal with anaphylaxis. Any further reactions should be treated by slowing the rate of transfusions and use of pre-medication with antihistamine.
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Moderate and Severe allergic Reactions Linked to IgA deficiency	Discuss with NHSBT consultants about ordering IgA deficient blood components.
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An allergic reaction that presents as moderate or severe should automatically trigger testing of the patient's IgA levels.
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Low IgA levels found on screening, in the absence of generalised hypogammaglobulinaemia, should trigger IgA antibodies testing and more sensitive confirmation testing of IgA levels.

Patients with IgA deficiency (<i>An IgA serum level of less than 0.07 g/L (in patients above 4 years of age), in whom other causes of hypogammaglobulinemia have been excluded</i>) diagnosed after a moderate or severe reactions should be discussed with the NHSBT consultants.
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BSH guidance states that IgA deficient patients who have reacted to blood components should be transfused with blood components from IgA deficient donors as a 1st choice.
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If not available be aware that although washed red blood cells would be a suitable 2nd choice, washed platelets (platelets in PAS still contain a significant amount of IgA). So alternatives to IgA deficient platelets should be discussed with NHSBT consultants and the patient's team.

Urgent treatment should not be denied or delayed because IgA deficient components are not immediately available
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Moderate and Severe allergic Reactions (first Reaction) not linked to IgA deficiency	Continue to order standard components. NHSBT consultant advice may be sought. <i>NHSBT might suggest a trial of pooled platelets over apheresis as the plasma content is lower in pooled platelets</i>
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Having 1 transfusion reaction however severe does not automatically mean you will have another, the patient can be pre-medicated with antihistamine (although evidence for the efficacy is low, it will not cause any harm). Patients who have had a transfusion related anaphylaxis should be discussed with an immunologist
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Patients should be transfused in a clinical environment with resuscitation facilities
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Moderate and Severe allergic Reactions (Recurrent) not linked to IgA deficiency	Discuss with NHSBT consultant about ordering washed red blood cells and washed Platelets (platelets in PAS)
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Where time permits permission to order washed blood and platelets should be sought from an NHSBT consultant. Standard components should be given if the transfusion is urgent and withholding blood components puts a patient at a greater risk than that of the potential reaction. Patients who have had a transfusion related anaphylaxis should be discussed with an immunologist

Urgent treatment should not be denied or delayed because washed components are not immediately available

Patients should be transfused in a clinical environment with resuscitation facilities if standard components are given.
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