21 Post-Transfusion Purpura (PTP) n=1

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Definition:

Post-transfusion purpura is defined as thrombocytopenia arising 5-12 days following transfusion of cellular blood components (red cells or platelets) associated with the presence in the patient of antibodies directed against the human platelet antigen (HPA) systems.

There was 1 case of suspected PTP this year.

Case 21.1: Probable PTP in a patient with immune thrombocytopenia

A female patient in her 70s was given one unit of red cells and two units of platelets for acute bleeding. She had a platelet count of 43x10^9/L prior to transfusion, ascribed to immune thrombocytopenia (ITP). Ten days after discharge she was readmitted with abdominal pain and a purpuric rash. Her platelet count had fallen to 5x10^9/L, and anti-HPA1a antibodies were subsequently demonstrated in her blood. She was treated with intravenous immunoglobulin (IVIg) and methylprednisolone, and achieved a platelet count >50x10^9/L 11 days after starting treatment.

This is considered as a probable case of PTP as the timing and serology is classical, although a deterioration of underlying ITP cannot be ruled out. The possible coexistence of ITP is interesting; previous Annual SHOT Reports have commented on a possible interaction, since destruction of autologous platelets is an essential part of the pathogenesis of PTP.

Figure 21.1: The number of cases of PTP with confirmed HPA alloantibodies reported annually to SHOT since 1996, a total of 57 reports. Cumulative data 1996 to 2018

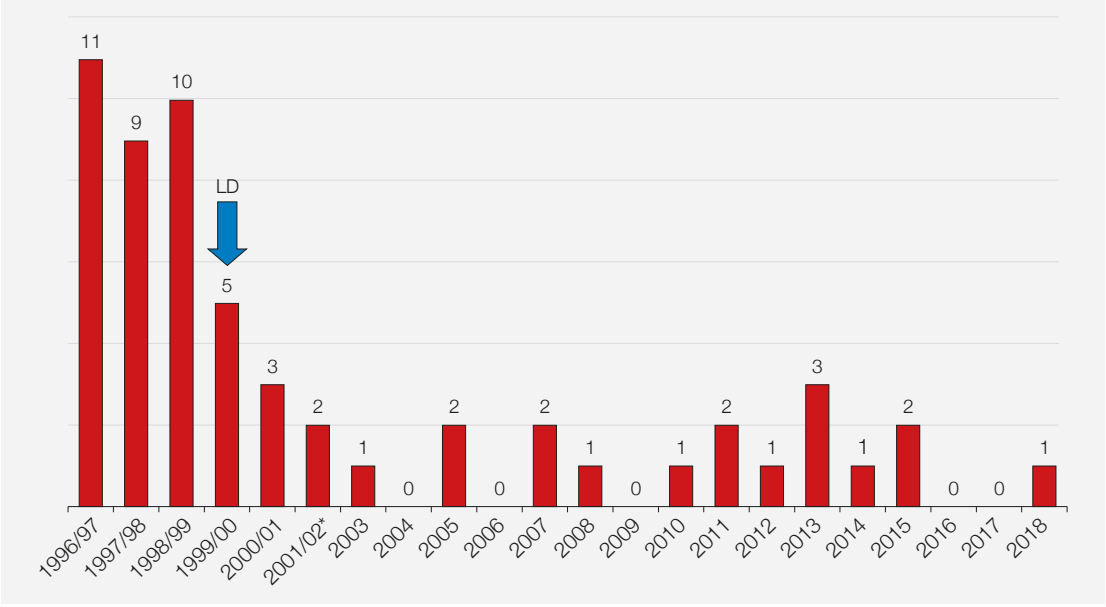

Table 21.1: Cumulative causative antibody specificity 1996-2018

Causative antibody specificity	Number of cases
HPA-1a alone	38
HPA-1a with other HPA antibodies	5
Other HPA antibodies (HPA-1b,-2b, -3a, -3b, -5a, -5b and-15a)	14
Total	**57**