

Removal of circulating toxic factor antibodies  
Monoclonal antibodies  
Autoantibodies  
Alloantibodies, immune complexes, chemicals, drugs  
Depletion of the mediators of inflammation  
Replacement of deficient plasma factor(s)  
Potentiation of drug action  
Enhanced reticuloendothelial function  
Altered immunoregulation  
Potentiating effects of plasma exchange on other modes of therapy

rationale

plasma exchange

potential indications for plasma exchange

#### **Immunoproliferative diseases with monoclonal immunoglobulins**

Hyperviscosity syndrome  
Cryoglobulinaemia  
Renal failure in multiple myeloma

#### **Autoimmune diseases due to autoantibodies or immune complexes**

Goodpasture's syndrome  
Myasthenia gravis  
Guillain-Barré syndrome  
Chronic inflammatory demyelinating polyneuropathy (CIDP)  
Stiff-man syndrome  
Systemic lupus erythematosus  
Fulminant antiphospholipid syndrome  
Thrombotic thrombocytopenic purpura  
Haemolytic uraemic syndrome  
Rapidly progressive glomerulonephritis  
Coagulation inhibitors  
Autoimmune haemolytic anaemia  
Pemphigus  
Paraneoplastic syndromes

#### **Conditions in which replacement of plasma may be beneficial $\pm$ removal of toxins<sup>16</sup>**

Disseminated intravascular coagulation  
Multi-organ dysfunction syndrome  
Overwhelming sepsis syndromes (e.g. meningococcaemia)

#### **Conditions in which the mechanisms are unknown**

Reye's syndrome

#### **Removal of protein bound or large molecular weight toxins**

Paraquat poisoning  
Envenomation?

\*This is an incomplete list and only includes disorders which are relatively common or in which plasma exchange has a definitive role to play.