plasma exchange

Plasma exchange may be beneficial for the removal of circulating toxic factor antibodies, monoclonal antibodies, and autoantibodies. It also helps in the depletion of mediators of inflammation, replacement of deficient plasma factor(s), and enhanced reticuloendothelial function. Altered immunoregulation and potentiation of drug action are other potential effects of plasma exchange on other modes of therapy.

**Rationale**

**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 ≥ removal of toxins**
- 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.*