**PURE RED CELL APLASIA DUE TO PARVOVIRUS INFECTION IN PAEDIATRIC RENAL TRANSPLANT RECIPIENTS: A CASE SERIES**

Parvovirus B19(B19V) is a DNA virus with a predilection for infecting erythroid progenitor cells. Pure red cell aplasia(PRCA) is a rare complication of parvovirus infection that occurs especially in immunocompromised patients where suppression of erythroid precursors may be permanent.

We describe 3 patients who developed PRCA after kidney transplantation that responded to Intravenous immunoglobulin therapy(IVIg).

Case presentation

All three patients underwent successful live donor kidney transplants within a period of 6 months. They were males aged 15, 13 and 9 respectively. Immunosuppression was with basiliximab, tacrolimus, mycophenolate mofetil and prednisolone. All three patients developed anaemia requiring blood transfusion 4, 2 and 3 months after transplantation, with haemoglobin values of 5.3g/dl, 5.8g/dl and 5.6g/dl, respectively. Red cell indices, white cell and platelet counts were normal. Reticulocyte indices were low. Bone marrow biopsy revealed PRCA in all. CMV screening was negative. Parvovirus PCR was positive in all while Parvovirus IgM was positive in Cases 2 and 3 but negative in 1.

A trial of IVIg was given at a dose of 0.4g/kg daily for 5 days to all. There was significant improvement in the reticulocyte counts and haemoglobin levels within one week of treatment. Immunosuppression was not reduced as there was a good response to IVIG.

Discussion

The close proximity of the transplants meant that our patients would have come into contact leading to cross infection with B19V. Their immunocompromised status made them liable to PRCA. Treatment with IVIg has been shown to be effective though multiple courses may be required.