PARVOVIRUS B19 INFECTION

Clinical presentation and diagnosis

→ Parvovirus can cause pure red cell aplasia in patients receiving Rituximab.[1][2][3][4][5]

→ Usually presented with persistent anemia of unknown etiology, sometimes following a febrile illness with a rash.[1]

→ The total immunoglobulin level may be within normal limits and serology against B19 is negative.

→ The diagnosis is usually made by **PCR**.

→ The presence of large pronormoblasts with nuclear inclusion bodies in the **bone marrow biopsy** may suggest the diagnosis.[3]

Treatment

The reported cases responded to **high-dose IVIG**.[1][2][3][4][5]

(1) Hartmann JT, Meisinger I, Krober SM, Weisel K, Klingel K, Kanz L. Progressive bicytopenia due to persistent parvovirus B19 infection after immunochemotherapy with fludarabine/cyclophosphamide and rituximab for relapsed B cell lymphoma. Haematologica. 2006;91 Suppl:ECR49.

(2) Isobe Y, Sugimoto K, Shiraki Y, Nishitani M, Koike K, Oshimi K. Successful high-titer immunoglobulin therapy for persistent parvovirus B19 infection in a lymphoma patient treated with rituximab-combined chemotherapy. Am J Hematol. 2004;77:370 –3.

(3) Sharma VR, Fleming DR, Slone SP. Pure red cell aplasia due to parvovirus B19 in a patient treated with rituximab. Blood. 2000;96:1184 – 6.

(4) Song KW, Mollee P, Patterson B, Brien W, Crump M. Pure red cell aplasia due to parvovirus following treatment with CHOP and rituximab for B-cell lymphoma. Br J Haematol. 2002;119:125–7.

(5) Klepfish A, Rachmilevitch E, Schattner A. Parvovirus B19 reactivation presenting as neutropenia after rituximab treatment. Eur J Intern Med. 2006;17:505–7.