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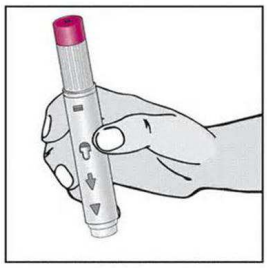
PURE RED CELL APLASIA ASSOCIATED WITH ADALIMUMAB THERAPY

M.P. Quesada Sanz[1], E. Márquez Fernández[1], D. Guerra Estévez[1], B. Marmesat Rodas[1], J. Gantes Trelles[1].
[1]Hospital Punta de Europa, Pharmacy, Algeciras, Spain.

Pure red cell aplasia is a severe, non-regenerative form of anemia, with selective erythroid aplasia of the bone marrow. Although there are congenital forms, most cases are adquired by toxic, radiation or drugs and 50% are idiopathic. Our objective is to describe the probable relationship between the occurrence of pure red cell aplasia and the treatment with adalimumab in a patient diagnosed with Crohn´s disease.

METHODS

22 years old woman who was admitted to hospital because of probably central origin anemia secondary to adalimumab administration, over base severe iron deficiency.The variables analyzed were: haemoglobin (g/dl), hematocrit (%), erythrocytes (x109/l), leukocytes (x109/l), platelets (x109/l), serum iron (μ g/dl), transferrin (mg/dl) and transferrin saturation index (%).

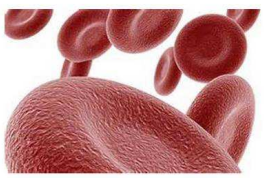


RESULTS

The patient started treatment with adalimumab in November 2013 with an induction dose of 160 mg at week 0 and 80 mg at week 2, followed by 40 mg every other week. Baseline haemoglobin, erythrocytes and hematocrit were 11,1 (norm.12-15), 4,18 (4-5) and 33,8 (37-47), respectively.Concerning to iron study, baseline values of serum iron, transferrin and transferring saturation index were 22,4 (50-70), 217 (200-360) and 8,13 (16-50), respectively. Platelets and leukocytes were in the normal range. After 5 months of treatment with adalimumab, the patient was admitted to hospital because of severe anemia (haemoglobin =4,1, hematocrit =14,1 and erythtocytes = 2,33), requiring stopping treatment and the administration of intravenous iron, 3 packed red blood cells and subcutaneous erythropoietin 40.000 once a week.After 5 weeks, the patient had haemoglobin values of 10,2 g/dl, showing a partial marrow recovery.

CONCLUSIONS

There have been rare cases of aplastic anemia associated with the use of tumor necrosis factor antagonists, so that, although their relationship is unclear, patients with confirmed significant hematologic abnormalities should be considered to discontinue the treatment.



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