

Tu1137 Hemophagocytic Syndrome During Inflammatory Bowel Disease (IBD): A Serious and Unfamiliar Complication of Immunosuppressive Therapy

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RATIONAL AND PURPOSE: Hemophagocytic syndrome (HLH), a rare disease characterized by inappropriate activation of macrophages resulting in phagocytosis of all bone marrow derived cells, mainly occurs in immunocompromised hosts. IBD patients treated with immunosuppressive drugs have an increased risk to develop HLH. The aim of our study was to describe the characteristics of patients with IBD associated with HLH and determine the prognosis.

PATIENTS AND METHODS: retrospective multicenter study conducted by the GETAID.

RESULTS: Between 2003 and 2012, 10/43 GETAID centers identified 27 patients (8 M/19 F). The mean age at diagnosis of HLH was 35 years (range 19-61). Twenty-four patients were followed for Crohn's disease, two for ulcerative colitis and one for indeterminate colitis. Disease duration of IBD at diagnosis of HLH was 8.1 years (range 0.1-34). Twenty five patients were under thiopurines in monotherapy (n=17), in combination with steroids (n=3), anti-TNF (n=4) or both (n=1); one patient received anti-TNF in monotherapy and one patient was on steroids, tacrolimus and mycophenolate mophetil for a liver transplant. At the time of diagnosis, immunosuppressive drugs were discontinued in all patients. The mean time between the first symptoms and diagnosis was 14 days (range 3-48). The clinical features were: fever (39-40°C) (27/27), rash (9/27), lymphadenopathy (11/27), splenomegaly (11/26), dyspnea (8/27), neurological disorders (5/27). Bicytopenia was observed in 23/27 patients. The mean fasting triglycerides was 3.4 mmol/L (range 1.3 and 6.3 mmol/L) and the serum ferritin 12 496 mg/L (range 746 and 99 393). Hemophagocytosis was observed on bone marrow aspiration in 19/23 (83%) patients. A pathogen was identified as the precipitating cause of HLH in all subjects: CMV (n=10), EBV (n=10), HHV1 (n=2), parvovirus B19 (n=2), BK (n = 2), Klebsiella oxytoca and Enterobacter aerogenes (n=1). Lymphoproliferative disorders [B lymphoma (n=3) and T-cell lymphoma (n=1)] were associated in 4 cases. A specific treatment for HLH was administered in 18 patients: immunoglobulins (n=10), steroids (n=11), etoposide (n=7), cyclosporine (n=1). Six patients died (22%), in whom HLH was related to EBV infection (n=4), CMV infection (n=1) and HHV1 infection (n=1). At the latest follow-up (average 27 months, range 0.1 to 100), 3 patients were in clinical remission without treatment, 4 patients underwent surgical resection, 3 patients received 5ASA, 1 patient steroids and 5 patients anti-TNF therapy. Thiopurine was restarted in 4 patients.

CONCLUSION: In all IBD patients under immunosuppressants, a febrile cytopenia should alert to the possibility of an HLH. Early diagnosis, identification of the causative agent and appropriate treatment could reduce the mortality of this life threatening conditions unfamiliar for the gastroenterologists.