Still's disease and haemophagocytic syndrome

Sir, We were very interested in the reports by Heaton et al., and by Morris et al. on two patients with Still's disease and virus-associated haemophagocytic syndrome (VAHS). Although no research of haemophagocytosis syndrome had ever been made in previous reports, it is striking to observe that acute episodes with similar clinical and biological features had already been reported and considered either as Reye's syndrome or as consumption coagulopathy in systemic juvenile chronic arthritis.

For many years we have been intrigued by this life threatening complication and reported it in 1979 as a consequence of either virus infection, gold therapy, or other recent modifications in drug administration. We recently published a comprehensive study of seven patients, in whom we observed the association of features of consumption coagulopathy, pancytopenia, liver function alterations of various degree, and metabolic disturbances with changes suggestive of proteolysis. In our view, macrophage or other accessory cells such as Kupffer's cells or endothelial cells might be the main cells responsible for this syndrome. Indeed, we had observed in histologic material from our patients features of macrophage activation with phagocytosed material. The role of these cells was also suggested by a comparison of the VAHS occurring in Still's disease with the main symptoms observed in two other rare and severe conditions: the accelerated phase of the Chédiak-Higashi syndrome and the familial haemophagocytic lymphohistiocytosis. In the two latter, the clinical manifestations include lethargy, fever, hepato-splenomegaly, pancytopenia, and profuse bleeding with laboratory evidence of liver dysfunction, coagulation abnormalities of complex origin, with a fibrinolytic process, and possible intravascular coagulation. These two syndromes are known to be associated with haemophagocytosis, and macrophages show in-vitro evidence of hyper activation. Thus VAHS or drug induced HS in JCA and HS in Chédiak-Higashi syndrome and in familial lymphohistiocytosis share common features of a probable systemic macrophage activation.

The question remains why systemic JCA patients are more susceptible to virus or drug induced HS. This underlines the vulnerability of patients with systemic JCA and great caution must be taken when treating with high dose aspirin, gold salts, when adding another non-steroidal anti-inflammatory drug, or when a virus infection occurs. Most of the patients seem to survive only if they are rapidly treated with high dose steroid.

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References