Eosinophilic Pneumonia: Autoinmune or Immunoallergic Phenomenon?☆

Neumonía eosinofílica, ¿fenómeno autoinmune o inmunoalérgico?

To the Editor:

I read with interest the clinical case reported by Hiroaki Satoh et al. and, as is known, chronic eosinophilic pneumonia (CEN) is a rare condition with distinctive presenting features, which are: the presence of cough, dyspnea, fever and pulmonary infiltrates with the presence of inflammatory cells, and eosinophil accumulation.[1]

In this case-report, it is associated with both the presence of antinuclear antibodies, such as anti-centromere antibodies, which show a clear non-specific autoimmune response, even knowing that the centromere antibodies related to certain conditions (scleroderma) have not been demonstrated to have a pathogenic role.[2]

As we have reported previously, it is unknown if the phenomenon of autoimmunity is involved in CEN as a part of itself or as a serological demonstration of overlap due to the nonspecific immune response of the host.[3]

Hypersensitivity responses include autoimmune diseases, directed toward self antigens. Not only Type I hypersensitivity, but also III and IV may be present in CEN, conditioning different signals of an inflammatory process as allergic or autoimmune phenomena.[4]

It has recently been described that the eosinophil can act as an antigen presenting cell. When presenting antigens, eosinophils provide costimulation signals to lymphocytes.

The surface membrane glycoprotein CD40 interacts with its ligand CD40-CD40L and in vivo studies have demonstrated activation and proliferation of eosinophils and mast cells associated with a Th2 cell response, suggesting that eosinophils can actively modulate the immune response with amplification of Th2, so perhaps this would be the link in relation to the autoimmune response associated with the role of the eosinophil.[5]

Meanwhile, research into this field goes on and for the time being we get to add one more case to those reported around the world, revealing that we still have a poor understanding of immunopathology in these interesting diseases.

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Efficacy of Tocilizumab in Refractory Adult-Onset Still's Disease; Report of 2 Cases☆

Eficacia de tocilizumab en enfermedad de Still del adulto refractaria; a propósito de 2 casos

Dear Editor:

Adult Still's disease is an entity of uncommon autoimmune origin, characterized from the physiopathogenic point of view by increased production of inflammatory cytokines, mainly tumor necrosis factor, interleukin 1 (IL-1) and IL-6.[1,2] Recently, we employed tocilizumab treatment with a good response in 2 patients with adult Still's disease, both with failure to respond to treatment with glucocorticoids and nonbiological disease modifying drugs.

Patient 1 is a 50-year-old woman, diagnosed with adult Still's disease in 2003 due to daily evening fever >39 °C, symmetric polyarthritis, generalized myalgia, evanescent salmon rash on the trunk and limbs, together with elevated acute phase reactants and increased ferritin level (1700 ng/ml). Other autoimmune, infectious and neoplastic causes were ruled out. In a span of eight years, she received nonsteroidal anti-inflammatory drugs, glucocorticoids in varying doses, antimalarials, sulfasalazine, methotrexate, leflunomide, azathioprine, rituximab, etanercept and infliximab, with partial response and multiple relapses. In March 2011, due to the persistence of fever, polyarthritis and elevated acute phase reactants, treatment was started with tocilizumab 8 mg/kg/month methotrexate 15 mg/week and prednisone 15 mg/day. A good response was observed after 4 weeks of treatment, which persists to date with improvement of general condition of the skin and joints, no fever and improvement of acute phase reactants. Dyslipidemia occurred as an adverse event, which warranted special treatment.

Patient 2 is a 53-year-old woman with a history of breast cancer in 1997, treated and without tumor activity. In October 2009 she presented maculopapular rash, daily fever, arthritis, myalgias, and weight loss of 11 kg in 4 months. She also had hepatosplenomegaly and generalized lymphadenopathy, normochromic normocytic anemia, neutrophilia, thrombocytosis, erythrocyte sedimentation rate (ESR) 67 mm/h, C-reactive protein (CRP) 84 mg/l and ferritin 1900 ng/ml. Myeloproliferative and infectious processes were ruled out. Still's disease was diagnosed and she received treatment with methotrexate 20 mg/week and prednisone in an initial dose of 1 mg/kg, with gradual reduction

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to 20 mg/day in 4 months, persisting with joint pain, myalgia, rash and malaise. We added tocilizumab treatment 8 mg/kg/month, with a good clinical response and significant improvement in acute phase reactants. So far, she has had no adverse events and is under close surveillance due to the history of neoplasia.

Both cases presented had adult onset Still's disease treated with tocilizumab and a very good response to treatment, almost from the first week, improvement in the clinical manifestations of fever, rash and arthropathy, and a frank and rapid reduction in the acute phase reactants (WBC, CRP, ESR). This is similar to the cases reported in the literature that relate very significant improvement of clinical manifestations and acute inflammatory response even in refractory patients with multiple prior therapies. As in the case of our patients, the majority of reports describe that the response is maintained and adverse effects, particularly dyslipidemia, improve with specific treatment.[3–11] Although the data available to date are still limited due to the rarity of the disease and limited availability of anti-IL-6 treatment, it seems clear that the use of tocilizumab represents a good alternative for the treatment of this disease, which can be chronic and potentially disabling. Our patients are the first to be reported in Latin American literature.

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