Letters to the Editors

HLA-DRB1* association with sarcoidosis

Sirs,

We have read with great interest the study by Petursdottir *et al*. that showed association of sarcoid arthritis, in most cases presenting as acute arthritis, with *HLA-DRB1*03* in patients from Iceland (1). With respect to this, we found association of several genetic polymorphisms with erythema nodosum (EN) associated with sarcoidosis in a population-based study on patients from Northwest Spain (2-5). EN, the most common cause of inflammatory nodules occurring usually on the lower extremities, may be idiopathic or associated to several conditions (6). Sarcoidosis often presents with constitutional symptoms, acute arthritis, especially in ankles, or periarticular ankle inflammation and EN (7). Many of these cases fulfill definitions of Löfgren's syndrome, a subtype of sarcoidosis manifested by an acute onset of EN and/or periarticular inflammation or arthritis of the ankles, with bilateral hilar lymphadenopathy (7).

We aimed to establish differences between patients with EN associated with sarcoidosis and those with idiopathic EN and controls. Interestingly, besides association with *MIF*, *E-selectin* or *IL6* gene polymorphisms (2-4), *HLA-DRB1*13* was significantly increased in patients with EN associated with sarcoidosis (18 of 32 patients [56.3%]) compared with 40 of 145 controls [27.6%]) (Bonferroni corrected p=0.02; OR=3.4 [95% CI: 1.5-7.4]) (5). However, although *HLA-B1*03* was also increased in patients with sarcoidosis compared with controls (12 [37.5%] *vs*. 29 [20.0%]), differences were not statistically significant. Nevertheless, the frequency of *HLA-B1*03* in our population was higher than in the series by Petursdottir *et al*. (28% of 36 patients). Therefore, we entirely agree with these authors on the need of additional studies encompassing larger series of patients to fully establish a *HLA-DRB1** pattern that may be associated with acute sarcoidosis.

M.A. GONZALEZ-GAY[1], *MD, PhD*
R. LOPEZ-MEJIAS[1], *PhD*
C. GARCIA-PORRUA[2], *MD, PhD*

[1]Division of Rheumatology, Hospital Universitario Marqués de Valdecilla, IFIMAV, Santander, Spain, [2]Rheumatology Unit, Hospital Universitario Lucus Augusti, Lugo, Spain.

Address correspondence to:
Miguel A. González-Gay,
Rheumatology Division, Hospital Universitario Marqués de Valdecilla, IFIMAV, Avenida de Valdecilla, s/n, 39008, Santander, Spain.
E-mail: miguelaggay@hotmail.com

Competing interests: none declared.

References

1. PETURSDOTTIR D, HARALDSDOTTIR SO, BJARNADOTTIR K *et al*.: Sarcoid arthropathy and the association with the human leukocyte antigen. The Icelandic Sarcoidosis Study. *Clin Exp Rheumatol* 2013; 31 711-6.
2. AMOLI MM, DONN RP, THOMSON W *et al*.: Macrophage migration inhibitory factor gene polymorphism is associated with sarcoidosis in biopsy proven erythema nodosum. *J Rheumatol* 2002; 29: 1671-3.
3. AMOLI MM, LLORCA J, GOMEZ-GIGIREY A *et al*.: E-selectin polymorphism in erythema nodosum secondary to sarcoidosis. *Clin Exp Rheumatol* 2004; 22: 230-2.
4. AMOLI MM, MIRANDA-FILLOY JA, FERNANDEZ-DIAZ ML, MARTIN J, OLLIER WE, GONZALEZ-GAY MA: Interleukin-6 promoter polymorphism at position -174 in biopsy-proven patients with erythema nodosum from a defined population. *Clin Exp Rheumatol* 2008; 26 (Suppl. 49): S155-6.
5. AMOLI MM, THOMSON W, HAJEER AH *et al*.: HLA-DRB1 associations in biopsy proven erythema nodosum. *J Rheumatol* 2001; 28: 2660-2.
6. GONZÁLEZ-GAY MA, GARCÍA-PORRÚA C, PUJOL RM, SALVARANI C: Erythema nodosum: a clinical approach. *Clin Exp Rheumatol* 2001; 19: 365-8.
7. GARCÍA-PORRÚA C, GONZÁLEZ-GAY MA, VÁZQUEZ-CARUNCHO M *et al*.: Erythema nodosum: etiologic and predictive factors in a defined population. *Arthritis Rheum* 2000; 43: 584-92.