nizing such pseudo-dermatomyostis cutaneous lesions as a complication of hydroxyurea therapy, leading to a correct diagnosis and thereby avoiding aggressive and unnecessary investigations. Physicians, particularly rheumatologists, should therefore be aware of the existence of such pseudo-dermatomyositis cutaneous lesions in patients receiving hydroxyurea therapy.

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Antinucleolar antibodies and parvovirus B19 arthritis

Sirs,

We read with great interest the article by Ferri *et al.* (1) in which they describe parvovirus B19 bone marrow infection in a significant percentage of systemic sclerosis (SSc) patients. The authors suggest the inclusion of B19 among the different viral agents which have been proposed to be responsible for the autoimmune alterations observed in SSc. One of the characteristics of the autoimmune findings in SSc is the presence of ANA with an antinucleolar pattern (AnoA) in the IIF in 8-43% of patients (2). Although they have been occasionally described in other processes, AnoA are almost exclusive linked with SSc and related processes (3). Recently we treated a patient with acute polyarthritis caused by B19, in whom we detected serum antinucleolar antibodies. This finding has not been described previously.

The patient is a 26-year-old female employed at a geriatric residence; she is also a part-time baby-sitter. Five days before admission, she complained of fever (38°C) and erythematous exantema with a mild itch which began at the forearms and extended to the thorax; these symptoms lasted for one day. Later, she presented odynophagia and myalgia, and the next day arthralgia at the shoulders and cervical and lumbar raquis, and symmetrical arthritis in the MCP and PIP of the hands, knees and ankles. The rest of the anamnesis was negative.

The patients came into the hospital using a wheelchair. Her general status was good and her physical examination was normal except for the synovitis and limited mobility in the shoulders, elbows, wrists and lumbar and cervical vertebral column. Radiographies of the thorax, hands, knees and pelvis were normal. A hemogram was normal. ESR was 28 mm and CRP 32 mg/l (NV < 8). Coagulation tests, serum parameters, Igs, C4, rheumatoid factor and serologies for *Salmonella, Brucella, Yersinia*, lues, rubeola IgM, HBV, HCV, CMV, EBV and *Borrelia burgdorferii* were normal or negative. The C3 level was 63 mg/dl (NV: 85-195) and ANA were positive at a 1/160 titer with a nucleolar pattern.

ENA and anti-dsDNA were negative. IgM antibody for parvovirus B19 was positive. Clinical symptoms disappeared completely after 3 weeks of antiinflammatory treatment with indomethacin. Three months later, ANA were negative, C3 had become normal, she presented Ig G antibody for HPV B19, and Ig M was undetectable.

In patients with B19 infections, laboratory alterations suggesting an autoimmune phenomenon are often found: diminished complement levels, circulating immunocomplexes and the transient presence of different autoantibodies including RF, ANA, anti-ssDNA, anti-dsDNA, anticardiolipins, anti-lymphocytes, anti-SSA, anti-SSB, anti-RNP and anti-Scl 70 (4-6), often associated to SSc (2) as well. The presence of antinucleolar antibodies has not been described in B19-induced arthritis, although they have been described in patients infected by other viruses such as infectious mononucleosis and hepatitis A (3).

AnoA include several kinds of autoantibodies targeted at antigens mainly located in the nucleoli. They are usually detected by IIF in Hep-2 cells and several patterns of IF have been described. They are primarily found in patients with SSc or related processes such as Raynaud's phenomenon or overlap syndromes. Nevertheless they have sometimes been described in diseases such as SLE, RA, DM-PM, GVHD and some neoplasic diseases (3).

In our patient, AnoA was transient. One year later she presented neither Raynaud's phenomenon nor any other symptom suggestive of SSc. However, after the findings of Ferri *et al.*, we believe that our patient should be followed for a longer time in order to exclude a possible evolution to SSc.

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