

## Rhupus syndrome

Jae Ki Min<sup>1</sup>, Kyoung Ann Lee<sup>1</sup>, Hae-Rim Kim<sup>2</sup>, Ho-Youn Kim<sup>2</sup>, and Sang-Heon Lee<sup>2</sup>

<sup>1</sup>Department of Internal Medicine, Konkuk University Medical Center. Seoul; <sup>2</sup>Division of Rheumatology, Department of Internal Medicine, Konkuk University School of Medicine, Seoul, Korea

Received: January 20, 2014 Revised: March 20, 2014 Accepted: June 23, 2014

Correspondence to Sang-Heon Lee, M.D.

Tel: +82-2-2030-7541 Fax: +82-2-2030-7748 E-mail: shlee@kuh.ac.kr A 45-year-old female presented with a facial rash for 2 weeks. She also had arthralgia of the hand and wrist joints with morning stiffness persisting for 1 hour. On physical examination, there was a typical malar rash on her face (Fig. 1). She had a swan-neck deformity of her left third finger and swelling and tenderness of the bilateral metacarpophalangeal (MCP), proximal interphalangeal (PIP), wrist, and knee joints. The laboratory results were as follows: erythrocyte sedimentation rate 91 mm/hr(normal, < 20), C-reactive protein 2.69 mg/dL(normal, 0.01 to 0.3), white blood cell 3,110/μL (normal, 4,000 to 10,000, lymphocytes 27.7%), hemoglobin 9.6 g/dL, platelet 190,000/ μL, anti-nuclear antibody 1:40 (a mixed homogenous and speckled pattern), anti-dsDNA antibody 14.2 IU/mL (normal, <7.0), rheumatoid factor 98 IU/mL(normal, 3 to 18), and anti-CCP antibody > 300 U/mL (normal, < 5). In addition, the serum complement levels were decreased

and C46.20 mg/dL (normal, 17 to 47), and the direct Coombs' test was positive for immunoglobulin G. The urine protein/ creatinine ratio was 561.93 mg/g. However, anti-cardiolipin, anti-β2 glycoprotein 1, and lupus anticoagulant antibodies were negative. Plain radiographs of both hands showed periarticular osteopenia, joint space narrowing, and marginal erosions at the MCP, PIP, and carpal joints (Fig. 2). Based on the clinical, laboratory, and radiographic results, she was diagnosed with both rheumatoid arthritis and systemic lupus erythematosus or "rhupus syndrome." She was treated with hydroxychloroquine 400 mg, celecoxib 200 mg, prednisolone 5 mg, and methotrexate 10 mg/week and her arthralgia and facial malar rash improved.

with C<sub>3</sub> 62 mg/dL (normal, 86 to 160),

## Conflict of interest

No potential conflict of interest relevant to this article was reported.



Figure 1. There were diffuse erythematous patches on both cheeks connecting over the nose, i.e., the typical butterfly-shaped malar rash.



Figure 2. The plain radiograph of both hands shows joint space narrowing at the 2nd to 5th proximal interphalangeal joints and marginal erosion and joint space narrowing at the 1st to 5th metacarpophalangeal, and carpal joints, and periarticular osteopenia bilaterally.