

Hyper eosinophilic syndrome associated with the onset of rheumatoid arthritis: a case report

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Introduction: Idiopathic hyper eosinophilic syndrome (HES) is a disorder marked by the sustained overproduction of eosinophils and is characterized by damage to multiple organ systems. We describe the case of a 48-year-old man affected by HES who subsequently developed rheumatoid arthritis (RA). To our knowledge, it is the first time that such a case has been reported in Korea. Case report: In October 2005, a 48-year-old man was admitted with non-productive cough, and rapidly progressive dyspnea. Laboratory examination revealed leukocytosis with 21.7% eosinophils [peak $5.01 \times 10^3 / \mu\text{l}$ (normal $0-0.45 \times 10^3 / \mu\text{l}$)]. Chest X-ray was unremarkable. The results of a bone marrow sample showed normal myeloblast findings, thus ruling out eosinophilia caused by myeloproliferative diseases. We therefore diagnosed idiopathic HES. Two months after presentation, the patient was doing well on 15 mg/day of prednisolone, but any attempts to lower the dose to below 10 mg/day resulted in a recurrence of the peripheral eosinophilia. In February 2016, while the patient was on steroid tapering therapy (15 mg/day), he complained of worsening pain in both ankles and wrists. Laboratory examination revealed leukocytosis with 40.4% eosinophils [peak $8.46 \times 10^3 / \mu\text{l}$ (normal $0-0.45 \times 10^3 / \mu\text{l}$)]. The erythrocyte sedimentation rate (ESR; 70 mm/h) and C-reactive protein (CRP) level (37 mg/dL) were also elevated. A bone scan revealed hyperemic uptake in both ankle and wrist joints. Rheumatoid factor was increased to 78.8 IU/mL and anti-cyclic citrullinated peptide antibody was elevated to 269.2 IU/mL. A diagnosis of RA coexisting with HES was made and the patient was started on methotrexate (MTX, 10 mg/wk) and methylprednisolone (30 mg/d). He showed rapid symptomatic improvement after treatment, with complete resolution of the dyspnea and joint symptoms. **Conclusions:** This case differs from preceding cases described in the literature in that HES did not develop in a patient who was originally treated for RA, but rather that symptoms of RA developed subsequently to HES. The onset of RA and HES were directly related, implying a common pathogenetic link between the two diseases.

Coexistence of rheumatoid arthritis and ankylosing spondylitis : case report

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Rheumatoid arthritis (RA) and ankylosing spondylitis (AS) are the representatives of the rheumatic disease. The coexistence of RA and AS is rare and there is no report with this coexistence so far in Korea, to our best knowledge. A 53-year-old female, diagnosed with RA 10 years earlier, complained lower back and left hip pain. The symptoms are exacerbation for the last 6 months, worsen at night. The feeling of morning stiffness over 1 hour. On physical examination, the Schober's test - 3.5cm and pain provocation test - Patrick's test was positive. Sacroiliac X-ray showed bilateral bony erosion (grade II sacroiliitis) (Figure 1). Genetic test demonstrated the presence of HLA-B 27. Thus, she was diagnosed as having AS, in addition to known diagnosis of RA. After establishing the diagnosis of AS, regular naproxen 1g/day were initiated and continued to receive her treatment including methotrexate, folic acid and sulfasalazine with the same dosages. However, the inflammatory activity was still high with no improvement of AS symptoms. So, sulfasalazine was stopped and adalimumab was started. After 3 months, her pain decreased. Six months follow-up showed stable disease activity without relapse. The coexistence of two inflammatory diseases could lead to the modification of the disease course and inadequate response to the treatment. So, we suggest when the disease progresses unexpected course despite of proper management, careful clinical assessment and appropriate determining test should be performed to early diagnosis and treat successfully.

