

In the name of God



S.U.M.S.

Department of Internal Medicine

**Shiraz E-Medical Journal**

**Vol. 9, No.3, July 2008**

<http://semj.sums.ac.ir/vol9/Jul2008/86059.htm>

## **Systemic Lupus Erythematosus Associated with Relapsing Polychondritis.**

Aflaki E\*, Nazarinia MA\*, Habib Agahi Z\*, Shenavandeh S\*, Jahanbani MR\*, Zahedi Kashkooli L\*, Rajaee A\*\*.

\*Assistant Professor, Department of Internal Medicine, Shiraz University of Medical Sciences, \*\* Associate Professor, Rheumatology Unit, Department of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.

Correspondence: Dr. Saeede Shenavandeh, Department of medicine, Namazee Hospital, Shiraz, Iran, Telephone: +98(711) 626-1086, Fax: +98(711) 626-1089, E-mail: shenavandehs@gmail.com

Received for Publication: February 11, 2008, Accepted for Publication: March 18, 2008.

---

### **Abstract:**

Relapsing polychondritis (RP) is an autoimmune disorder manifested by episodes of progressive inflammation and destruction of both articular and nonarticular cartilage<sup>1</sup>.

Although RP has been shown to have an increased association with other autoimmune disorders, this disease has been found to coexist with systemic lupus erythematosus (SLE)<sup>2</sup>.

We present a patient with SLE, who developed left auricular inflammation, polychondritis and ocular inflammation associated with hoarseness.

---

**Keywords: polychondritis, hoarseness, discoid lupus.**

### Case Report:

We reported a 75 years old lady with clinical criteria fulfilling the diagnosis of SLE<sup>3</sup>.

She was admitted in the Rheumatology Unit with chief complaint of recent skin rash and left auricular pain. Also she had history of hoarseness (progressively increased).

Physical examination disclosed multiple skin rash on anterior chest wall, extremities, forehead, superficial ulcer on hard palate, associated with left auricle swelling, tenderness, erythema and mild cyanosis, associated with right sided conductive hearing loss.

Laboratory studies revealed a hemoglobin value of 15 g/dl, while blood cell count of 5800/mm<sup>2</sup>, platelet count of 181000/mm<sup>2</sup>, erythrocyte sedimentation rate of 30mm/hr (Wintergreen) and negative rheumatoid factor.

Antinuclear antibody (ANA) of 1/80, anti-ds-DNA of 77.7 IU/ml (normal up to 20), elevated C3 and C4, normal C reactive protein, BUN of 15 mg% with serum Creatinine of 1 mg%, normal liver function test, normal urinalysis, prothrombin time 14 second with control of 13, and with PTT of 42 were observed.

The patient was treated with oral prednisolone, 40 mg daily, and the symptoms were resolved. Hydroxychloroquine sulfate was added 400 mg daily. After ten days, the ears findings responded to treatment except mild redness but her hoarseness that

was chronic for about 5 years didn't change with this treatment.



Figure 1, chondritis of left ear.

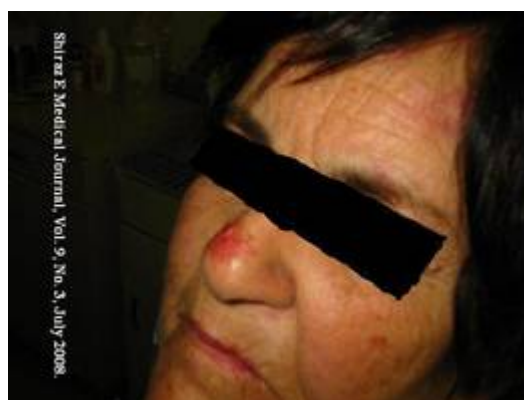


Figure 2, discoid lesion of nose.



Figure 3, Chondritis of right ear.

### Discussion:

Relapsing polychondritis is an autoimmune disorder manifested by episodes of pro-

gressive inflammation and dysfunction of both auricular and non auricular cartilage. Antibodies to type II collagen were found in patients with RP, but were also found in patients with rheumatoid arthritis and patients with other autoimmune sensorineural hearing loss<sup>4,5,6</sup>. Antinuclear antibodies were found in up to 99% of SLE patients<sup>3</sup>, but were also found in those with RP in low titer<sup>7</sup>. The proposal diagnoses for RP by McAdam are as follow: auricular polychondritis, arthritis and ocular inflammation with a positive cartilage biopsy with other criteria of chondritis of the nasal cartilage, chondritis of the respiratory tract and audiovestibular damage<sup>2</sup>.

In our case, hoarseness became apparent before and then after left auricular inflammation with tenderness and erythema and mild cyanosis (Figure I) associated with right sided conductive hearing loss.

Right auricular inflammation was mild compared to left auricle (Figure II). Relapsing polychondritis may appear in conjunction with other diseases such as thyroid disease, ulcerative colitis<sup>8</sup>, and rheumatoid arthritis<sup>9</sup>. McAdam et al. found RP in two patients among 136 SLE patients reported in the literature<sup>2</sup>. Moreover other case reports led to totally 21 previously reported cases of RP associated with SLE<sup>10,11</sup>.

### Acknowledgment:

We would like to thank the Office of Vice Chancellor for Research of Shiraz University of Medical Sciences for financial support and Dr. Davood Mehrabani, the Center for Development of Clinical Research of Nemazi Hospital for editorial assistance.

### References:

1. White JW. Relapsing polychondritis. *South Med J* 1985; 448-451.
2. McAdam LP, O'Hanlan MA, Bluestone R, Pearson CM. Relapsing polychondritis prospective study of 23 patients and a review of the literature. *Medicine* 1976; 55: 193-215.
3. Tan EM, Cohen AS, Fries JF, Masi AT, Mcshane DJ, Rothfield NF, et al. The 1982 revised criteria for the classification of systemic lupus erythematosus. *Arthritis Rheum* 1982; 25: 1271-1277.
4. Foidart JM, Abe S, Martin GR, Zizic TM, Barnett EV, Lawley TJ, et al. Autoantibodies to cartilage and type II collagen in relapsing polychondritis. *N Engl J Med* 1987; 299: 1203-1207.
5. McCabe BF. Autoimmune sensorineural hearing loss. *Ann Otol Rhinol laryngol* 1979; 88: 585-589.
6. Ebringer R, Roak G, Swana GT, Bottazzo G F, and Doniach D. Autoantibodies to cartilage type II collagen in relapsing polychondritis and other rheumatic disease. *Ann Rheum Dis* 1981; 40: 473-479.
7. Piltte JC, El-Rassi R, Amoura Z. Antinuclear antibodies in relapsing polychondritis. *Ann Rheum Dis* 1999; 58: 656-657.
8. Tishler M, Caspi D, Yaron M. Classical rheumatoid arthritis associated with relapsing polychondritis. *J Rheumatol* 1987; 14: 367-368.
9. Rajaei A, Vossoghi AA. Classical rheumatoid arthritis associated with relapsing polychondritis. *J Rheumatol* 1989; 16: 1263-1265.
10. Harisdangkul V, Johnson WW. Association between relapsing polychondritis and systemic lupus erythematosus. *South Med J* 1994; 87(7): 753-757.
11. emedicine.com (Homepage on the Internet). Compton N L. Relapsing Polychondritis. Last Updated: June 13, 2006. Available from: <http://www.emedicine.com/derm/topic375.htm>