7. Fujisawa M, Fujioka H, Tatsumi N, Inaba Y, Okada H, Arakawa S, et al. Levels of interferon alpha and gamma in seminal plasma of normozoospermic, oligozoospermic, and azoospermic men. Arch Androl 1998; 40: 211–214.
8. O'Morain C, Smethurst P, Dore CJ, Levi AJ. Reversible male infertility due to sulphasalazine: studies in man and rat. Gut 1984; 25: 1078–1084.

Annular Erythema Associated with Essential Thrombocythemia

Naoko Motohashi, Takahiro Satoh, Hiroo Yokozeki and Kiyoshi Nishioka
Department of Dermatology and Immunodermatology, Graduate School, Tokyo Medical and Dental University, 1-5-45 Yushima, Bunkyo-ku, Tokyo 113-8519, Japan. E-mail: tasa-1688.derm@tmd.ac.jp
Accepted May 7, 2002.

Sir,
Annular or figurate erythema often occurs in association with several diseases, including Sjögren's syndrome, subacute lupus erythematodes, fungal infections, Borrelia infections and even malignant disease of internal organs. However, in many cases of annular erythema, it is difficult to determine the underlying disease causing the skin lesion, even with careful examination. We present a case of annular erythema associated with essential thrombocythemia.

CASE REPORT

A 69-year-old man presented with a 5-year history of pruritic erythematous plaques on his trunk and extremities. He had been suffering from essential thrombocythemia for 20 years. Physical examination revealed annular or arcuate erythema on his back, thighs and knees. The lesions appeared as thumb-head-sized erythema. They gradually became larger and formed irregularly-shaped annular plaques with central healing. Each lesion persisted for approximately one week.

Laboratory findings were as follows: red blood cell count, 3.73×10^{12}/l; hemoglobin, 95 g/l; white blood cell count, 5.5×10^{9}/l; platelet count, 5.4×10^{11}/l (normal, 1.5–3.5×10^{11}/l). Liver and renal function tests and urinalysis were within normal limits. Anti-nuclear antibody and anti-SSA and anti-SSB autoantibodies were negative. A skin biopsy showed a superficial perivascular infiltrate composed of lymphocytes. The patient's condition was complicated by repeated thrombocythemia during the course of his disease. The platelet count increased to a maximum of 9.72×10^{11}/l, and spontaneously returned to the normal level. An interesting fact is that skin lesions stopped recurring when the platelet count dropped below approximately 3×10^{11}/l.

DISCUSSION

In the present case, skin lesions seemed to be associated with increased platelet count. Although the underlying mechanism for this is unknown, Tsuji (1) has demonstrated the presence of CD41a (GPII b/III a complex) on lesional vascular walls, suggesting the contribution of chemical mediators released from adhered, activated platelets in erythemas associated with essential thrombocythemia.

Cutaneous manifestations of essential thrombocythemia include erythromelalgia, acute febrile neutrophilic dermatosis and thrombotic diseases (2, 3). The present case, together with that of a previous report (1), strongly suggests that annular erythema is one of the important skin features that indicate the presence of thrombocytoses such as essential thrombocythemia.

REFERENCES

1. Tsuji T. Erythemas associated with essential thrombocythemia. J Dermatol 1995; 22: 788–794.
2. Michiels JJ, Abels J, Steketee J, van Vliet HH, Vuzevski VD. Erythromelalgia caused by platelet-mediated arteriolar inflammation and thrombosis in thrombocythemia. Ann Intern Med 1985; 102: 466–471.
3. Hehlmann R, Luderschmidt C, Goebel FD, Henze K. Relapsing acute febrile neutrophilic dermatosis and essential thrombocythemia. Blut 1984; 48: 297–305.