

Annular Erythema Associated with Essential Thrombocythemia

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Accepted May 7, 2002.

Sir,
Annular or figurate erythema often occurs in association with several diseases, including Sjögren’s syndrome, subacute lupus erythematoses, 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, \(3.73 \times 10^{12}/l\); hemoglobin, 95 g/l; white blood cell count, \(5.5 \times 10^{9}/l\); platelet count, \(5.4 \times 10^{11}/l\) (normal, \(1.5–3.5 \times 10^{11}/l\)). 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 \(9.72 \times 10^{11}/l\), and spontaneously returned to the normal level. An interesting fact is that skin lesions stopped recurring when the platelet count dropped below approximately \(3 \times 10^{11}/l\).

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 thrombocytoes such as essential thrombocythemia.

REFERENCES