

LIVEDO RETICULARIS WITH ACUTE RHEUMATIC FEVER

Puneet Bhargava, C M Kuldeep, N K Mathur

A 10-year-old boy, a diagnosed case of acute rheumatic fever, presented with livedo reticularis involving whole of body except face. Livedo reticularis has been very rarely reported in rheumatic fever.

Key Words: Livedo reticularis, Rheumatic fever

Introduction

Livedo reticularis is a mottled bluish (livid) discolouration of the skin which occurs in a net like pattern. This discolouration seen mainly in young women of less than 40 years is persistent and may change from reddish blue in a warm environment to deep blue in cold environment.¹ It has been suggested that this net like pattern is due to venous drainage at the margins of areas of skin richly supplied by arterial cones.

This pattern may result from arteriolar disease causing obstruction to inflow from blood, hyperviscosity or from obstruction to outflow of blood in the venules,² leading to deoxygenation of blood and cyanotic reticular pattern. We report a case of livedo reticularis occurring with acute rheumatic fever.

Case Report

A 10-year-old Hindu boy presented with complaints of reticular reddish-blue mottling of the skin all over the body except the face for 15 days. He was a diagnosed case of acute rheumatic fever having carditis (mitral regurgitation / tricuspid regurgitation), polyarthritis, fever, increased PR interval and raised ASLO titres and C-reactive protein. Personal history didn't suggest any familial trait or drug reaction. SLE, polyarteritis

nodosa (PAN) and cryoglobulinemia were excluded by clinical examination and laboratory tests. Dermatological examination revealed benign generalised livedo reticularis (Fig.1).

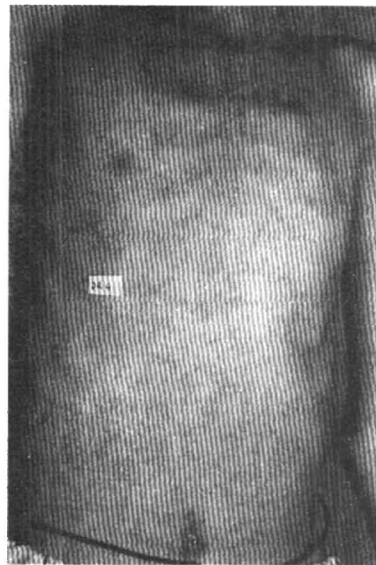


Fig. 1. Livedo reticularis on the chest and abdomen.

Discussion

Secondary livedo reticularis is often a cutaneous manifestation of collagen disorders especially SLE, PAN, rheumatoid arthritis and dermatomyositis.¹ Circulating immune complexes, defect in fibrinolytic system, abnormal platelet adhesiveness and other blood or tissue abnormalities are often noticed in these collagen vascular disorders,

From the Department of Skin, STD and Leprosy, SMS Medical College Hospital, Jaipur, India.

Address correspondence to : Dr N K Mathur
C-24, Peeyush Path, Bapu Nagar, Jaipur-302015.

which may be associated with the pathogenesis of livedo reticularis.³ Histopathologically immune complexes containing IgA, IgM, complement factors and fibrin have been found in blood vessel walls in these patients.⁴ These changes in SLE and secondary syphilis have been reported to be due to high titre of anticardiolipin antibodies.⁵ Livedo reticularis has been very rarely reported in acute rheumatic fever.⁶ Rheumatic fever is associated with activation of multiple clones of autoantibodies. It may be possible that autoantibodies found in rheumatic fever may be involved in pathogenesis of livedo reticularis.

References

1. Shear NH, Page EH. Disorders due to physical factors. In: Fitzpatrick TB, Eisen AZ, Wolff K, editors. *Dermatology in general medicine*. New York: McGraw-Hill, 1993: 1584-5.
 2. Copeman PWM. Livedo reticularis. *Br J Dermatol* 1975; 93: 519.
 3. Cunliffe WJ, Menon IS. The association between cutaneous vasculitis and decreased blood fibrinolytic activity. *Br J Dermatol* 1971; 84: 99.
 4. Winkelmann RK, et al. Clinical studies of livedoid vasculitis (segmental hyalinizing vasculitis). *Mayo Clin Proc* 1974; 49: 746.
 5. Weinstein C, et al. Livedo reticularis associated with increased titres of anticardiolipin antibodies in systemic lupus erythematosus. *Arch Dermatol* 1987; 123: 596.
 6. Haber H. Zur Aetiologie der livedo racemosa. *Arch Dermatol Syphilol* 1931; 163: 1.
-