ERYTHEMA INDURATUM: REPORT OF ACASE

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Abstract — The clinical and histological feature of 52 years old woman with erythema induratum are discribed The characteristic cutaneous lesions on the legs of middle-aged woman were violaceous, indurated nodules, 1 to 2 cm in diameter which were painful, occasionally ulcerated and could heal with scarring. The diagnosis was confirmed by a strongly positive tuberculin test, histologic feature and by clearing of lesions after antituberculosis therapy. The histologic feature was infiltration of dermis and subcutaneous by inflammatory cells with epithelioid cells and multinucleated giant Langhans cell.
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INTRODUCTION

The cause of erythema induratum, a chronic nodular eruption occurring on the legs of women remains in dispute. In 1861, Bazin described the first typical skin changes in association with tuberculosis. Since then neumerous authors have contested the tuberculous origin of this condition (1,2).

CASE REPORT

A 52 years old woman was referred because of violaceous indurated and necrotic nodules on the both of her legs. The lesions first began 10 years ago with a single nodule on her left leg and then on another leg. The lesions were indurated and tender. Some of them were necrotic and ulcerated with white pus (Fig. 1). She had history of rheumatic heart disease and replacement of aortic and mitral valve 12 years ago. Her medication was digoxin one tablet daily and warfarin 5-7.5 mg/day with PT Control. She have married and her husband had a history of pulmonary tuberculosis 8 years ago and recieved medication. There was 10 to 12 violaceous indurated, necrotic and tender lesions on her both legs. (Fig. 1). Tuberculin test had 45 mm induration, CXR was normal and routine laboratory tests were normal. Biopsy of her lesions showed inflammatory cells, epithelioid cells and multinucleated giant Langhans cells in dermis and subcutaneous tissues.

She received 4 antituberculosis drugs (Isoniazid, Rifampin, Pyrazinamide and Ethambutol) for 2 months and then 2 agents (Isoniazid and Rifampin) for 4 months. The necrosis of lesions progressed upto 20 days after drug therapy and then regressed on the third months of treatment (Fig. 2).

During treatment, patient recieved 15-20 mg warfarin with PT control, because rifampin induces liver metabolism of warfarin. On 6th month of therapy there was only violaceous scar and no nodules or ulcers.

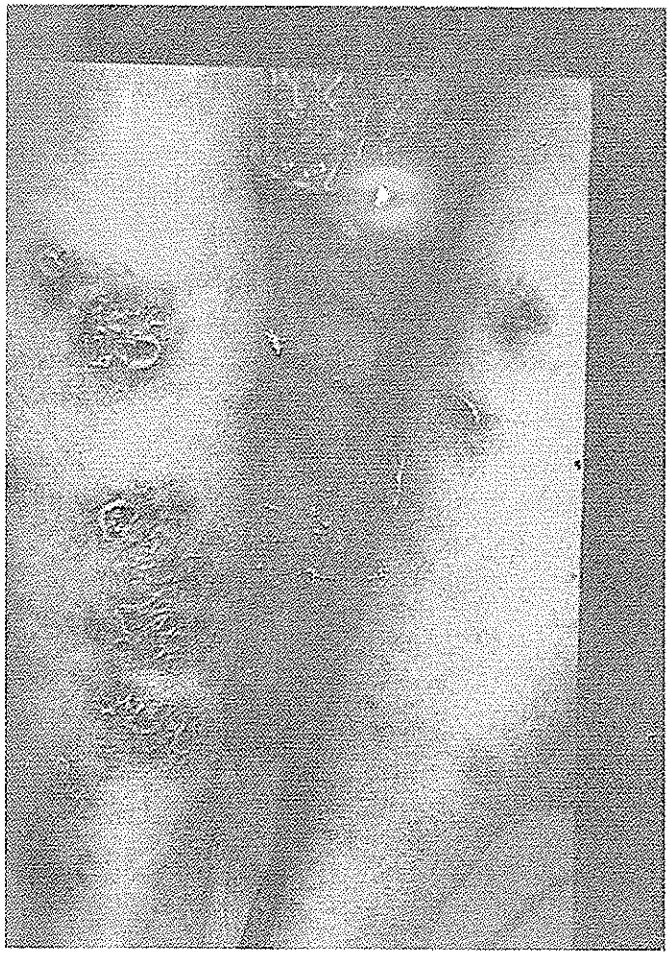

Fig. 1. Violaceous indurated necrotic lesions on first day of treatment

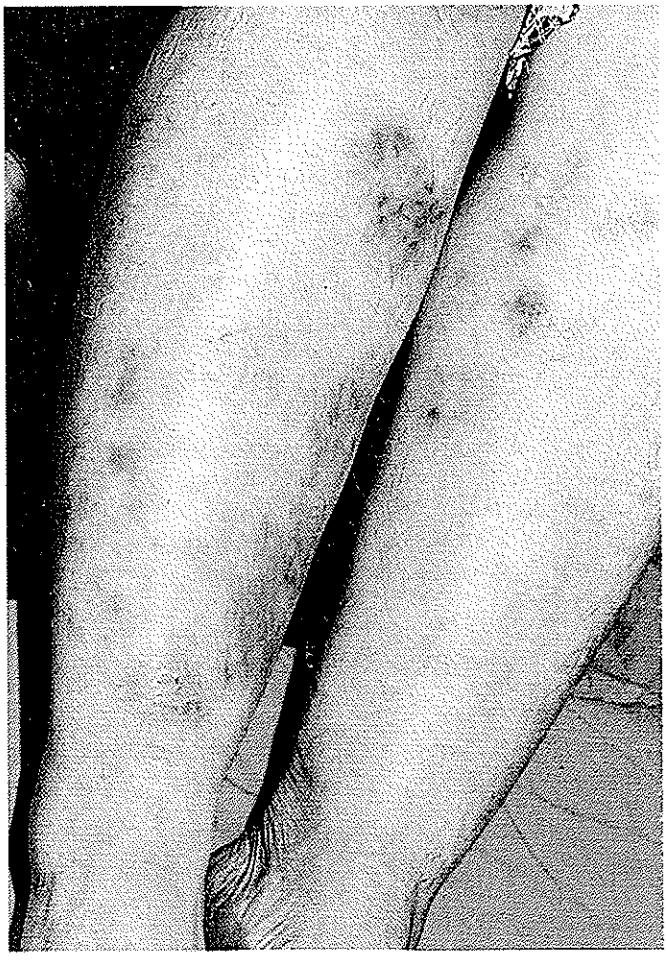

Fig. 2. Complete recovery at the end of treatment

DISCUSSION

Tuberculoids lesions are a number of cutaneous conditions associated with elsewhere in the body but Mycobacterium tuberculosis cannot be seen or cultured from these lesions (3). These lesions are thought to be allergic reaction to infection. They include erythema induratum (Bazin's disease) and papulonecrotic tuberculoids (4). The disease is common in women (1,4) and most lesions are present on the legs but they also occured on the arms, thighs, feet and buttocks (3). Our patient was a woman with lesions on her legs and she had no lesions on other site of her body.

There is a connection between tuberculosis and erythema indratum (5). Large series of patients have personal or family histories of tuberculosis. Our patient's husband has the history of pulmonary tuberculosis 8 years ago but on P/E and his CXR there was not any evidence of active tuberculosis at that time.

Tuberculin test is strongly positive in these patients (1,2,3,4). Our patient had 45mm induration in her tuberculin test. Cytologic findings in erythema induratum are dermal necrosis, poorly formed granulomatous infiltrate, vasculitis, perivascular spongydema and follicular necrosis of suppuration and a negative Ziehl - Neelsen stain (1,4). Response to antituberculosis drug therapy is dramatic (1,4,6) as in our patient but there is no report about progression of necrosis after treatment. Differential diagnosis are distinction between the disseminated forms and allergic vasculitis and sarcoidosis of the skin (6).

In conclusion, the present clinical observation together with pronounced cellular response to purified protein derivative suggests a tuberculous origin of erythema induratum of Bazin (1).

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