

## Papulonecrotic Tuberculid – A Case Report



### Dermatology

**KEYWORDS:** Cutaneous tuberculosis, Papulonecrotic tuberculid, Mantoux test

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### ABSTRACT

Tuberculosis which is caused by Mycobacterium tuberculosis can present in various forms. Tuberculids are a group of such manifestation. One such type is Papulonecrotic tuberculid (PNT). It is an asymptomatic, chronic disorder, occurring in crops associated with an underlying or silent focus of tuberculosis. We report a case of Papulonecrotic tuberculid for its rarity.

### Introduction:

India has the highest burden of tuberculosis (TB) in the world and cutaneous TB accounts for about 1.5% of extrapulmonary disease [1,2] Skin lesions could be either "true" cutaneous TB (lupus vulgaris, TB verrucosa cutis (TVC), scrofuloderma, orificial TB, military TB) or Tuberculids. [3] The latter are believed to represent an Arthus-type hypersensitivity reaction to a focus of infection elsewhere and by definition are culture negative [4]. Tuberculids include lichen scrofulosorum (the commonest), Erythema Induratum of Bazin and Papulonecrotic tuberculid. [3] PNT is a rare Tuberculid with very few case series in literature. [4,5,6] The basic diagnostic criteria for PNTs are : strongly positive Mantoux test, typical clinical features, a tuberculoid histology with endarteritis and thrombosis of the dermal vessels, and response to antituberculous therapy (ATT) [7]

### Case Report:

A 20 year old female came to our clinic with multiple asymptomatic lesions over face, upper back that were gradually progressing since 2-3 months. She gives a history of fever that lasted for 1 to 2 months 2 years back that subsided on taking medication. No history of loss of appetite or any other symptoms. Mantoux test done elsewhere one month back presented as deep ulcer.

On examination, multiple erythematous, necrotic, discrete papules were present over face, upper back. The site of Mantoux test showed ulceration. ESR was elevated at 110mm/1st hr. Histology was suggestive of papulonecrotic tuberculid showing wedge shaped folliculocentric infiltrate extending upto mid dermis with central neutrophilic microabscess surrounded by palisading epitheloid histiocytes with peripheral lymphocytes.

### Discussion:

The term Tuberculid was first used by Darier in 1896 to represent recurrent, papular and nodular skin eruptions, usually disseminated and symmetric, showing a tendency to spontaneous resolution. [8] The tuberculids represent a group of disorders resulting from hypersensitive immune reactions within the skin due to hematogenous dissemination of Mycobacterium tuberculosis (MTB) or its antigens from a primary source. [9] The absence of tubercle bacilli in tuberculids is due to their small number and rapid destruction. Mycobacteria are detected by polymerase chain reaction (PCR) in these lesions. [10] Anti tuberculous therapy has been found to be effective [8]

### Summary:

This case is presented because of its rarity in this era of evolved tuberculosis treatment as well as the typical clinical, histological and immunological features. In any asymptomatic popular eruption in a TB endemic area one should always consider the diagnosis of PNT and do the necessary workup.

### Tables/Charts:



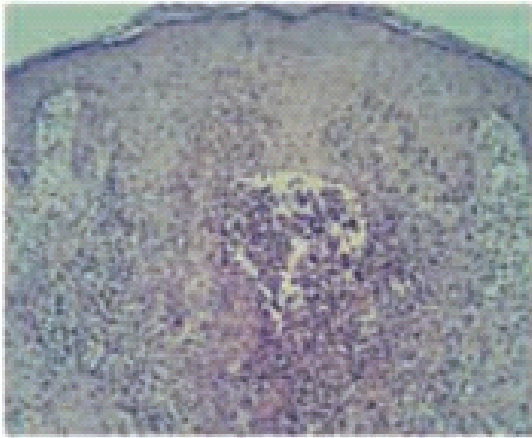
**Fig-1 : Multiple Necrotic Papules over face**



**Fig-2 : Multiple papules over neck and upper back**



**Fig-3 : Mantoux showing deep ulceration**



**Fig-4 : Histopathology showing folliculo centric infiltrate**

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