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## Papulonecrotic tuberculid affecting face and neck: an unusual presentation

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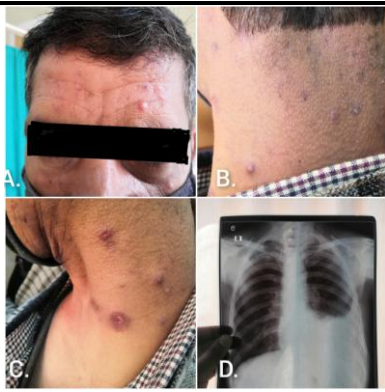
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**Introduction:** Tuberculids are hypersensitivity reactions to distant focus of M.tuberculosis in a immunocompetent individual. Clinically they presents as popular, papulonodular and necrotic lesions with a predilection for extremities. We are presenting a patient with predominant involvement of face and neck and on detailed clinical workup diagnosis of pulmonary tuberculosis was made.

**Case report:** A 43 years old male adult presented to us with recurring crops of multiple dark colored raised lesions over face and arms for last 3 years. Initially patient was not having any systemic complaints but for last three months patient started having evening rise of temperature, anorexia and loss of appetite.

On dermatological examination there was involvement of face, neck in form of discrete indurated, dusky red papules with crusting and central necrosis. There was no involvement of limbs. The routine hematological and biochemical investigations were within normal limits raised ESR 45mm/hr (westergren). Patient tested negative for HIV. Chest radiograph showed left sided pleural effusion, for which pleural tap was done which revealed raised ADA (78U/mL). Mauntox was strongly positive with induration of 20mm. Histopathological examination revealed central zone of coagulation necrosis surrounded by chronic inflammatory cells and lymphocytic vasculitis of small vessels. No acid fast bacilli were seen. Patient was started on ATT and many lesions disappeared within 3 weeks with scarring. General condition also improved and he has no cough. He is still on ATT.



- A. Flesh colored papules over forehead with few showing erosion over surface
- B. Dusky red papules over nape of neck with scarring at places
- C. Multiple papules with some showing necrosis in centre with surrounding hyperpigmentation
- D. Chest radiograph showing pleural effusion on left side

**Discussion:** In 1896, Darier introduced the concept of "tuberculids," the clinical manifestations of which include papulonecrotic tuberculids, lichen scrofulosorum, and erythema induratum of Bazin. The entity is still being questioned today because the clinical and histological appearances are not very specific.<sup>[1]</sup>

The pathophysiology of this condition is controversial. The most commonly held view is that PNT represents a hypersensitivity reaction to TB antigens released from a distant focus of infection.<sup>[2]</sup> Evidence of TB elsewhere is reported in up to 40% of patients.<sup>[3]</sup>

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).<sup>[4]</sup> The histological findings may be sometimes inconclusive, showing a nonspecific or tuberculoid picture.<sup>[5]</sup>

Clinically, papulonecrotic tuberculid is characterized by papulonodular, pustular or necrotic lesions with crusting in a more or less symmetric fashion, with a predilection for extremities<sup>[6,3,7]</sup>. However in our patient extremities were spared with involvement of face and neck region only and lesions were associated with mild itching. Patient had applied multiple topical medications and indigenous preparations with no relief. He was also given course of antibiotics with minimal relief before he came to us.

#### **Declaration of patient consent:**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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#### **Conflicts of interest:**

There are no conflicts of interest.

#### **References:**

1. Braun-Falco O, Thomas P. [The tuberculid concept from the current viewpoint]. *Hautarzt* 1995;46:383-7.
2. Dar NR, Raza N, Zafar O, Awan S. Papulonecrotic tuberculids associated with uveitis. *J Coll Physicians Surg Pak* 2008;18:236-8.

3. Jordaan HF, Van Niekerk DJ, Louw M. Papulonecrotic tuberculid. A clinical, histopathological, and immunohistochemical study of 15 patients. *Am J Dermatopathol* 1994;16:474-85
4. Jeyakumar W, Ganesh R, Mohanram MS, Shanmugasundararaj A. Papulonecrotic tuberculids of the glans penis: Case report. *Genitourin Med* 1988;64:130-2.
5. Stevanovic DV. Papulonecrotic tuberculids of glans penis. *AmaArch Derm* 1958;78:760-1.
6. Fitzpatrick TB, Eisen AZ, Wolff K, Freedberg IM, Austen KF. *Dermatology in General Medicine*. 5th ed. New York: McGraw-Hill; 1999. Tuberculosis and other mycobacterial infections; pp. 2370–95.
7. Jordaan HF, Schneider JW, Schaaf HS, et al. Papulonecrotic tuberculid in children. A report of eight patients. *Am J Dermatopathol*. 1996;18(2):172–85.

