DERMATOPATHOLOGY

# CLINICOPATHOLOGICAL SPECTRUM OF CUTANEOUS REACTIONS TO TATTOO PIGMENTS- A CASE STUDY IN INDIAN PATIENTS

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Introduction: There has been a rising trend of cutaneous reactions to tattoo pigments with an increase in the practice of tattooing for religious and cosmetic purposes. Several types of histological reactions to tattoo pigments have been described.

Objective : To study the various types of cutaneous reactions to tattoo pigments and to correlate them clinico-histopathologically.

Materials and methods: We analyzed the demographic, clinical and histological findings in patients who presented with cutaneous reactions to tattoo pigments. Special stains for acid fast bacilli and lepra bacilli were performed as required. The final diagnosis was made based on clinico-pathological correlation.

Results: A total of seven patients were included in the study. The mean age was 25± 2.7 years and male to female ratio was 5:2. The various types of reactions to tattoo pigments based on clinicopathological correlation were- lupus vulgaris, molluscum contagiosum, lepromatous leprosy, sarcoidosis and lichenoid reaction in 1 patient each. Two patients developed necrotizing granulomatous reaction. Fite Faraco stain showed 6+ positivity with solid staining lepra bacilli in lepromatous leprosy. The patient who developed tattoo sarcoidosis subsequently developed cutaneous lesions of sarcoidosis at non-tattooed skin also. All the reactions developed to black ink except for lichenoid reaction, which occurred to red ink.

Conclusions: Both infective and non-infective dermatoses can develop as a complication of tattoo pigments. In tropical countries like India, where cutaneous infections like leprosy and tuberculosis are still endemic, it is important to consider these infections secondary to tattoo inoculation. Clinico-pathological correlation is of utmost importance to characterize the various tattoo reactions.