

**Chemical burn following 50% TCA
for acne: presentation of a case and
a focused review**

Case Report

- A 38yr old Asian male with Fitzpatrick phototype IV,used 10%TCA at home for acne.self applied 50%TCA to see faster results then he experienced severe stinging and white frosting,presented to dermatologist after 4days with marked skin discolouration.
- On examination,intense hyperpigmentation of skin with almost ecchymotic colour and sharp lines of demarcation.Skin was non tender and no hyper keratosis.
- Biopsy was taken from an involved area on the forehead near the hairline.

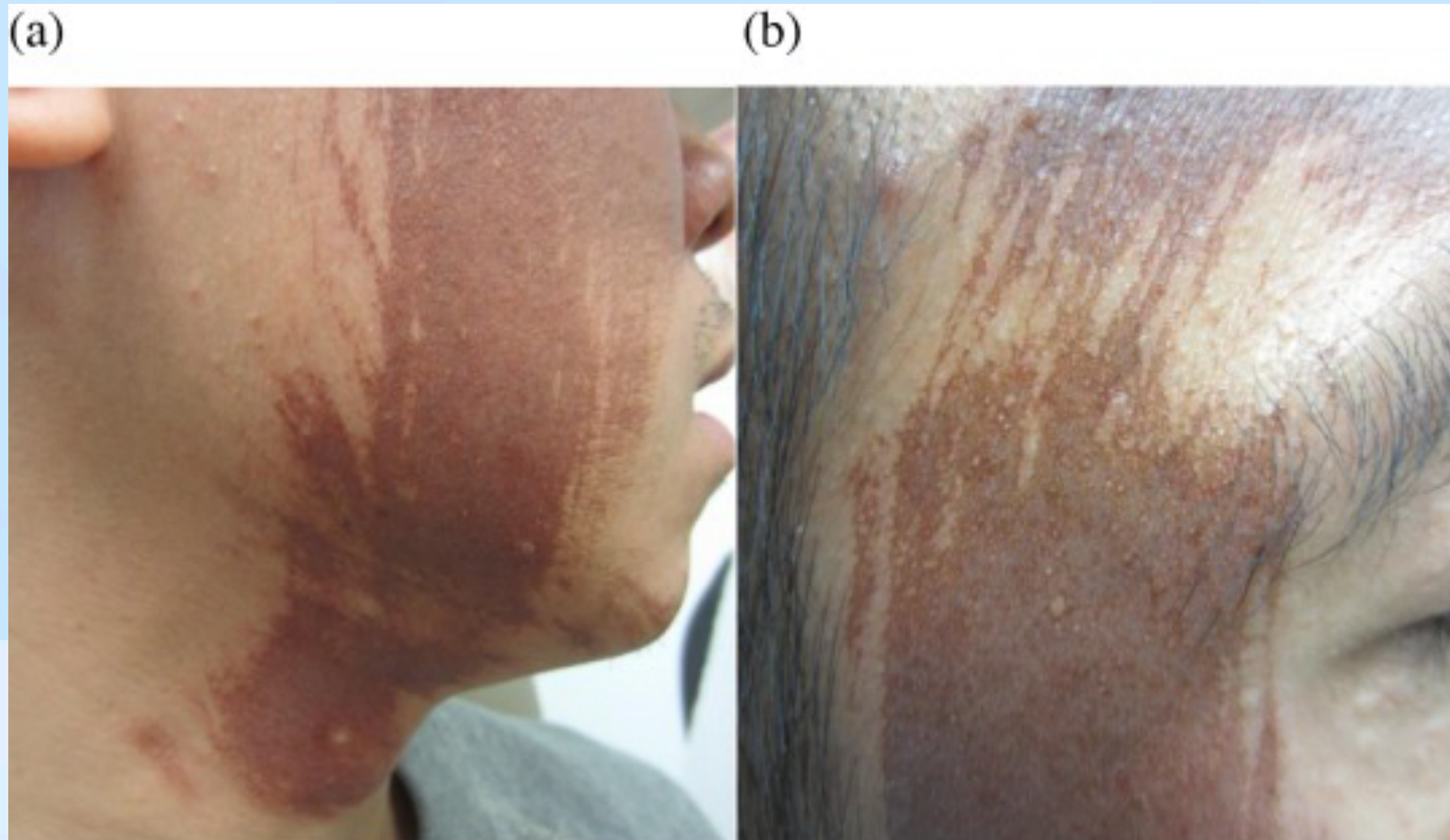


Fig. 1. Erythema and hyperpigmentation four days following 50% TCA application to the face (a) and temple (b).

- **Histopathological findings:**
- Necrosis of superficial spinous layer.
- Focal full thickness epidermal keratinocyte necrosis
- Mild superficial peri vascular lymphocytic infiltrate with few neutrophils and eosinophils.
- Pigment retention with necrotic and viable keratinocytes
- Focal pigment incontinence with few melanoma ages in papillary Dermis
- Features consistent with chemical burn due to TCA

- **Management:**
- Patient was started on
- Regimen of fluocinolone 0.01% cream, hydroquinone 4% cream, tretinoin 0.05% cream with aggressive moisturisation.
- Patient was instructed to use sun protection by wearing a hat and applying sunscreen every few hours.
- Unfortunately this patient was lost to follow-up.