

Cultural Dermatoses

39

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Dermatoses caused by following cultural and religious practices are illustrated in this chapter:

- 1. Kumkum
- 2. Holy ash (Vibhuti)
- 3. Sticker Bindis or Bindi leukoderma
- 4. Diffuse cutaneous larva migrans/creeping eruption
- 5. Coloured strings
- 6. Drawstring dermatitis
- 7. Henna
- 8. Turmeric and aloe vera
- 9. Nose and ear piercing
- 10. Prayers nodules in Muslims

39.1 Kumkum

Kumkum is a powder used for social and religious markings in certain communities of Sri Lanka, especially among Hindus. It is made from turmeric or other local materials. The turmeric is dried and powdered with a bit of slaked lime, which turns the rich yellow powder into a red colour. Kumkum is most often applied to the forehead by women and as well as men. However,

women use it more frequently. In addition to the forehead, it is applied over the parting area of the hair by married women as a sign of their marital status. But nowadays it is used in different colours as a fashion.

Clinical Features These people may present with allergic as well as irritant contact dermatitis and may manifest as erythematous, papular and vesicular lesions. In addition they present with chemical leucoderma and lichen planus pigmentosus.

The possible contact allergens in kumkum include turmeric, Sudan-1, 4-aminoazobenzene, brilliant lake red R and cananga oil (Figs. 39.1, 39.2, and 39.3).

39.2 Holy Ash (Vibhuti)

Hindus use to apply holy ash commonly over the forehead and sides of the neck. Sometimes they apply it over the chest and upper limbs as well. Vibhuti is prepared by burning balls of dried cow dung in a fire pit with rice husk and clarified butter.

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Fig. 39.1 Lichen planus pigmentosus like pigmentation following kumkum (photographed by Dr. Felicia Srisaravanapavananthan)



Fig. 39.2 Lichen planus pigmentosus like pigmentation (photographed by Dr. Felicia Srisaravanapavananthan)

Clinical Features This cultural practice leads to acute irritant contact dermatitis. In addition it can lead to eczematization and lichenification (Fig. 39.4a, b).



Fig. 39.3 Lichen planus pigmentosus like pigmentation (photographed by Dr. Felicia Srisaravanapavananthan)

39.3 Sticker Bindis or Bindi Leucoderma

Chemical leucoderma is an industrial disorder in developed countries, and the common causative chemicals are phenols and catechols. As a religious mark, people use to wear this sticker over the forehead. Hindu women are strongly conditioned to wear a bindi at all times, especially in public. Causative agent is PTBP which is present in high concentration in the glue. This chemical is a known melanocytotoxic agent. This entity is common in women who wear it continuously day and night.

Clinical Features Usually irritant dermatitis precedes the onset of depigmentation.

(PTBP (para tertiary butylphenol) formaldehyde resin is a phenol-formaldehyde resin found in commercial adhesives and in particular in adhesives used to bond leather and rubber, particularly in the manufacture of shoes (Fig. 39.5).)



Fig. 39.4 (a, b) Lichenification and hyperpigmentation after applying Vibhuti (photographed by Dr. Felicia Srisaravanapavananthan)



Fig. 39.5 Chemical leucoderma (photographed by Dr. Felicia Srisaravanapavananthan)

39.4 Diffuse Cutaneous Larva Migrans/Creeping Eruption

Although most of the cultural dermatoses are inflammatory in nature, we encounter some infective diseases like cutaneous larva migrans. It



Fig. 39.6 Diffuse cutaneous larva migrans in a Hindu worshiper following rolling over sand during festival season (photographed by Dr. Felicia Srisaravanapavananthan)

is a parasitic skin infection caused by hookworm larvae that usually infest cats and dogs. Humans can be infected with the larvae by walking barefoot on sandy beaches or contacting moist soft soil that has been contaminated with animal faeces. We have come across few patients with multiple itchy, serpiginous tracts following rolling over sand during festival season (to show their respect to God) (Fig. 39.6).

39.5 Coloured Strings

In Sri Lanka Sinhalese and Hindus wear coloured strings around the neck, arms or waist. These may cause allergic contact dermatitis, depigmentation and Koebnerization of certain dermatoses like vitiligo, psoriasis, etc.

39.6 Drawstring Dermatitis

This results from traditional cloth like saree, salwar and baggy trousers. This drawstring is tightly tied around the waist. This can lead to irritation, lichenification, postinflammatory leucoderma, hyperpigmentation and Koebnerization of existing dermatoses like vitiligo and psoriasis.

39.7 Henna

A natural dye derived from the leaves of *Lawsonia inermis* plant. Pure henna or red henna is hypoallergenic and rarely being associated with adverse reactions. In our community people use red henna for temporary hair and beard colouring and body art like tattooing on hands, arms and feet. We encounter patients with eczematized dermatoses, contact dermatitis and vesiculobullous or lichenoid reactions who had used preparations of red henna mixed with pigment enhancers which is cosmetically more accepted (Figs. 39.7, 39.8, and 39.9).

39.8 Turmeric and Aloe Vera

Some teenagers use *turmeric* and aloe vera as a native remedy for acne as well as to make the skin fair. These patients present with multiple hypopigmented patches over the face which can be misdiagnose as pityriasis versicolor.

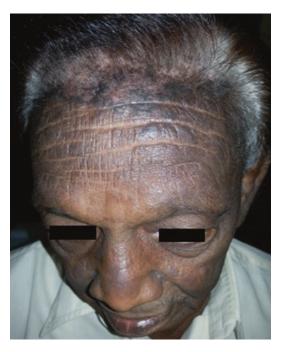


Fig. 39.7 Lichenified eczema and chemical leucoderma following applying henna on scalp (photographed by Dr. Felicia Srisaravanapavananthan)

39.9 Nose and Ear Piercing

This is a common practice in Asian countries. This procedure can lead to keloid formation, granuloma formation and several infectious diseases (Fig. 39.10).

39.10 Prayer Nodules in Muslims

Prayer is mandatory every day in Muslims. During that time they adapt different posture which leads to frequent friction causing thickening, hyperpigmentation, lichenification, nodulocystic lesions and callosity. Prayer marks usually develop on the forehead, knees, ankles and dorsum of feet (Fig. 39.11).

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Fig. 39.8 Phytophotodermatitis to henna applied on hands in a Muslim girl. Acute vesicular type progressed to form large blisters on palms (photographed by Dr. Ranthilaka R. Ranawaka)



Fig. 39.9 Chemical leucoderma following black hair dye (photographed by Dr. Ranthilaka R. Ranawaka)



Fig. 39.10 Keloid after nose piercing (photographed by Dr. Felicia Srisaravanapavananthan)



Fig. 39.11 Hyperpigmentation over the forehead and bridge of the nose where they touch the floor during prayers in Muslims (photographed by Dr. Felicia Srisaravanapavananthan)