



DERMATOSIS CAUSED DUE TO ETHNIC PRACTICES IN INDIA – A CASE SERIES

Dermatology

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ABSTRACT

This study talks about the prevalence of socio-economic practices in India, which often lead to a variety of skin diseases. Mudichood- a condition caused by using *sambrani* (Benzoin resin) which is considered as a natural fragrance, they heat sambrani and use the smoke to dry the hair which results in flat topped itchy papules. 'kumkum' application causes pigmented contact dermatitis or/and lichen planus pigmentosus, sticker bindis causes contact leukoderma. Callosities caused by toe rings occur due to a constant cycle of pressure, friction and thickening leading to circumscribed hyperkeratotic plaques. Thali thread contact dermatitis occurs due to cultural practices that can lead to different types of dermatoses that are caused by frictional forces, contact sensitization and sometimes occlusions. DRAWSTRING/WAISTBAND/ EVIL EYE THREAD dermatitis is a type of frictional dermatitis that results from tightly worn garments like traditional *Sari* and *Salwaar kameez*. Evil eye thread is worn as a pendant or around the ankle.

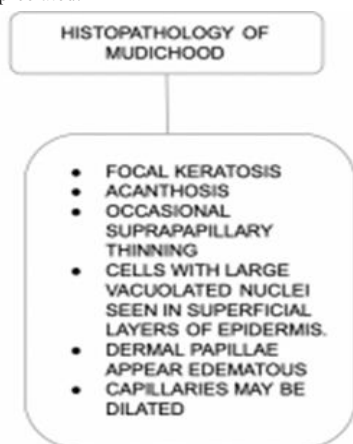
KEYWORDS

MUDICHOOD

Also known as hair heat in the region of Kerala, south India due to *sambrani* (BENZION RESIN) which is considered as a natural fragrance, a practice that is followed in many south Indian households, smoke is generated by heating sambrani and using it to dry the hair.

The factors causing this condition include - high temperature, sweat, friction and humidity.

This presents as itchy papules that are flat topped with a thin keratinous rim, and a slight depression in the centre that are follicular and violaceous in nature, size ranging from 2-4 mm mostly seen on the nape of neck and sometimes also on the upper back, pinnae, forearms. If the scales that are adherent are removed manually, hyperpigmented base can be appreciated.

**Fig1. Table showing histopathology of Mudichood**

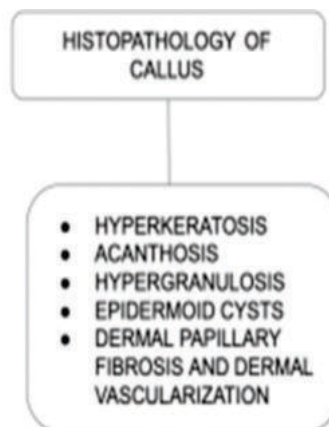
Treatment for the above condition requires the person to use 3-5% salicylic acid, regularly washing with shampoos and avoiding following this tradition.

Callosities/ Lichenification Caused By Toe Rings And Anklets:

Toe rings mostly made of metal or gold are worn over the second toe which is considered as a tradition in few parts of India. Corn or callosity is usually found on the plantar aspect of the second toe after wearing them for years together.

Callus or callosities can be described as circumscribed hyperkeratosis

of skin that is produced by repeated or in some cases constant friction or pressure, in this condition the callus causing agent is the toe ring. The cycle of pressure, friction, thickening continues until either corn or callus develops

**Fig2. Table showing histopathology of callus**

Treatment includes - Avoiding the cause causing the condition, which in this case is avoiding wearing toe rings, symptomatically it can be treated by paring after soaking the feet in warm water. But this has to be done periodically. topical agent like urea or salicylic acid can help in softening the callus.

**Fig1a and 1b.**

Image showing circumscribed hyperkeratotic plaques on the plantar aspect of second toe



Fig 2. Image showing hyperkeratotic, crusted plaque on the second toe showing lichenification

There is a custom of wearing anklets in Indian household which can cause constant friction and discolouration to the surrounding skin



Fig 3a & 3b shows, dyspigmented plaque over the area where the anklets are worn causing Contact leukoderma

Contact Dermatitis To Thali Thread:

The thread is considered as a holy thread referred to as *mangalasutra*, which is worn by married women, the thread is usually dipped in turmeric (Turmeric- is a spice used in southern part of India which is *CURCUMA LONGA*, used for flavour and also for its medicinal properties. Curcumin is main ingredient in turmeric) during the rituals, which has a very important position in socio-religious practice in southern part of India. These cultural practices can lead to different types of dermatoses that can occur due to frictional forces, contact sensitization and sometimes occlusions. This can also aggravate conditions that are pre-existing such as Tinea infections (Dermatophyte infections), leukoderma due to pressure, frictional lichenoid dermatitis.



Fig 4a & 4b shows, hyperkeratotic lichenified plaque over the nape of the neck



Fig 5a & 5b shows, hyperkeratotic lichenified plaque over the nape of the neck



Fig 6a, 6b shows, eczematoid dermatitis secondary to curcumin present in the thali thread



Fig 7a, 7b, 7c & 7d shows, hyperkeratotic lichenified plaque over the nape of the neck due to constant wearing of heavy metal/gold chain



Fig 7c & 7d

Pigmented cosmetic Contact dermatitis due to Kumkum/sindoor/ holy ash:

Kumkum is generally applied to the centre of the forehead and in hair parting (vermilion) by married women. Forehead is one of the most common sites close second site is glabellar area. Even though Kumkum is used by majority of Hindu population, dermatitis occurs only in few this could be due to either constant use for a very long period of time or due to individual susceptibility. Usage of Kumkum or Holy ash can also be seen as a common practice in males for religious practices.

Dermatitis can occur in the form of pigmented contact dermatitis or/and lichen planus pigmentosa.



Fig 8a & 8b. showing multiple papules with lichenification due to applying holy ash for a prolonged period of time



Fig 9a&9b shows, pigmented plaque due to vermilion over the glabella and forehead



Fig10a & 10b shows, well defined depigmented patch over the forehead



Fig11. shows, pigmented crusted plaque over the glabella due to vermilion



Fig12. shows, violaceous well defined plaque present over the glabella and forehead due to holy ash and vermilion



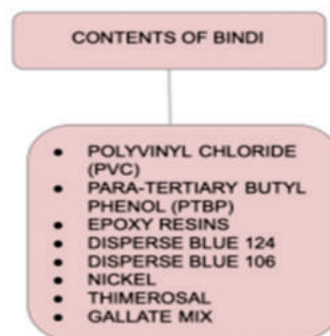
Fig 13a&13b shows, depigmented linear plaque due to holy ash



Fig 14a&14b shows, pigmented plaque over forehead

Contact Leucoderma Due To Bindi:

Even though there is an overlap between the terms Kumkum and Bindi they are not the same as in Kumkum comes a powder or paste where Bindi is available as either paste or sticker that can be worn only between the eyebrows. Contact dermatitis is the most common manifestation of sticker binds. Patient presents with itching, irritation and erythema prior to the development of depigmentation. The period between the usage and pigmentation can range from a few days to a few years.



It is possible depigmentation caused by Bindi may be more common in patients with pre-existing conditions like Vitiligo.

Treatment of Bindi leukoderma consists of early recognition of the condition and avoidance of sticker bindis and topical mild steroids or melanocyte transfer surgery

Drawstring/waistband/ Evil Eye Thread Dermatitis:

This is a type of frictional dermatitis that results from tightly worn garments like traditional *Sari* and *Salwar kameez* or a string of thread tied around the waist as a part of culture in certain areas of India.

Sari is usually worn over a petticoat that is fastened by a drawstring. This practice results in chronic friction at the waist and this in turn can lead to post inflammatory depigmentation or leukoderma, lichenified grooves, scaly plaque.

chronic friction with sweating and a humid environment can also predispose to candida infections, dermatophytosis.

Evil eye thread/Taweez is traditionally made of silk thread that is worn on the left ankle or over the neck causing contact dermatitis to the material of the thread because of constant friction and occlusion. Treatment includes prevention by tying the drawstrings loosely and topical steroids and emollients can be used.



Fig15. Image showing scaly ill-defined plaque with hypopigmentation in the area where waist thread was tied.



Fig 16a & 16b Image shows, pigmented patch over the flexural areas where generally drawstring is tied



Fig 17. shows, crusted pigmented plaque predisposing to dermatophytosis infection because of constant friction



Fig 18. shows, pigmented to hypopigmented plaque in the area where the drawstring was tied earlier



Fig 19. Showing pigmented plaque in the flexural folds due to tight draw string



Fig 20. Showing Unilateral hyperkeratotic, pigmented, prominent skin margins presenting as lichen simplex chronicus secondary to evil eye thread over the left ankle



Fig 21. Showing multiple pigmented papules over the area where Taweez/evil eye thread was tied