

from August 2004 to June 2006 to estimate the frequency of dermatoses caused by cosmetics in patients attending dermatology OPD and to clinically characterize various types of dermatoses caused by cosmetics.

Seventy-one patients with various types of cosmetic dermatoses were seen. Mean age of the patients was 42.9 years with female to male ratio of 1.6:1. *Kumkum* alone was the responsible cosmetic product in 41 patients (57.7%). Sticker *bindi* alone was incriminated in eight patients (11.3%), *kumkum* and sticker *bindi* both in five patients (7%), hair dye in eight patients (11.3%), lightening creams in four patients (5.6%) and after-shave lotion, nail polish, moisturizing cream, tilak and toothpaste in one patient each. Face was involved in 69 patients (97.1%), scalp and neck were involved in eight patients each (11.3%), abdomen in five patients (7%) and infra-axillary area in one patient (1.4%). Most common type of cosmetic dermatosis was pigmented contact dermatitis (PCD) (40 cases), followed by allergic contact dermatitis (ACD) (24 cases), leukoderma seen in nine patients, hypopigmentation seen in two patients and acneiform eruptions seen in one patient.

Cosmetic products most commonly incriminated for dermatitis are different in different countries and the pattern of dermatitis is determined by the way local populations use the cosmetic products.^[3] According to Pasricha,^[4] most common cause of contact dermatitis due to cosmetics in India is hair dye. Mehta *et al*^[5] suspected sticker *bindi*, hair dye and face creams to be the most common causes in that order of frequency. Kumar *et al*^[6] reported face creams as the most common (30%) cause of cosmetic dermatitis, followed by hair dye (16%) and soaps (14%).

Particular cosmetics, such as *kumkum*, *bindi*, *tilak*, are applied in India and a few other countries among the Hindus.^[5] Hence, dermatitis due to these products are reported only in Indians.^[4,5] In our study, *kumkum* was the most common cause of cosmetic dermatoses (46/71 patients, 64.7%). Typically, *kumkum* is used by women of Indian origin (especially the Hindus).^[4,7,8] But, in our study, males were also involved by *kumkum* dermatitis in significant proportion (16/46, 34.8%). They were using *kumkum* for religious purposes. In south Indian states '*kumkum*' is prepared at home by alkalizing pure turmeric powder^[4] but commercial *kumkum* is used more often nowadays. The exact composition of commercially available *kumkum* is not known, but is known to contain starch or chalk powder colored with various azodyes.^[8] Other known components in commercial *kumkum* include various dyes (coal tar dyes, toluidine red, erythrosine and lithol red

Clinical spectrum of dermatoses caused by cosmetics in south India: High prevalence of *kumkum* dermatitis

Sir,

Cosmetics are defined as "articles intended to be rubbed, poured, sprayed on or sprinkled, introduced into or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness or altering the appearance".^[1] Adverse cutaneous reactions to cosmetics can be of various types.^[2]

A descriptive study was conducted in the department of Dermatology and STD, in a tertiary care centre in south India

calcium salt),^[2] fragrances, groundnut oil, tragacanth gum, turmeric powder, parabens,^[9] and canaga oil.^[7]

The *bindi* spot is traditionally worn only by married Hindu women, but it is now regarded as a fashion accessory and is worn by unmarried women and even by non-Hindus. The spot may be painted on the skin or a plastic disc secured with adhesive may be used.^[10] Contact dermatitis can develop to them depending upon the material used to make the *bindi* mark. Adhesive material in sticker *bindi* is also known to produce contact dermatitis.^[11,12] Another unique product used by the Hindus is *tilak*, which is either *chandan* - powdered dry wood of the sandal tree (*Santalum alba*) or ash.^[4]

According to an Indian study by Dogra *et al*,^[13] the commonest type of cosmetic dermatosis was contact allergic dermatitis (29/49 cases, 59.2%), followed by contact irritant dermatitis (15 cases), hyperpigmentation (eight cases), hypopigmentation (six cases), contact urticaria (five cases), acneiform eruptions (four cases), hair breakage (two cases) and nail breakage (one case). The most common type of cosmetic dermatosis seen in our study was pigmented contact dermatitis (40/71 patients).

The term 'pigmented contact dermatitis' was introduced by Osmundsen in 1970 to explain the pigmentation which followed contact dermatitis. However, the dermatitis may not be clinically overt and hyper pigmentation can be the only visible manifestation of a contact allergy.^[14] *Kumkum* is emerging as an important cause of pigmented contact dermatitis in recent reports.^[8,10]

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