PATCH TESTS IN KUM-KUM DERMATITIS

V P Purnima, T C Muthuswami and Jayakar Thomas

Twenty patients having contact dermatitis on the forehead due to kum-kum were patch tested with the commercially available kum-kum, and also the turmeric powder used as such, as well as after alkalinisation with potassium hydroxide to produce a reddish brown colour. Patch tests were positive in all the patients with the commercial kum-kum, but not with the turmeric powder in either form.

Key words: Contact dermatitis, Kum-Kum, Patch tests, Turmeric.

Kum-Kum is held in high esteem by the south Indians, especially the married women who apply it as a red mark on their forehead as a sign of their marital status. Religious devotees also apply it on their forehead after a visit to the temple. Some individuals develop a pigmented spot or frank contact dermatitis in this area which is attributable to kum-kum. In olden days kum-kum was prepared at home by treating powdered turmeric with alum, but with the advent of synthetic chemicals the household kum-kum has been replaced by a variety of dyes. We have investigated the cause of this type of contact dermatitis in 20 patients seen by us.

Materials and Methods

Twenty cases of contact dermatitis suspected to be caused by kum-kum were selected at random and subjected to patch tests using the following materials: (1) Turmeric powder made into a paste using distilled water. (2) Alkalinised turmeric prepared by mixing 50 gm of turmeric powder with a few drops of potassium hydroxide

From the Department of Dermatology, Govt. Stanley Hospital, Madras-600 001, India.

Address correspondence to : Dr. T. C. Muthuswamy.

solution in distilled water, till the turmeric powder changed its colour to reddish-brown.

(3) Commercial kum-kum used by the patient. Patch tests were performed using standard techniques.¹

Results

Positive patch tests were obtained in all the 20 cases with the commercial kum-kum, while only one case showed al-positive reaction with the alkalinised turmeric powder. Turmeric powder used as such did not produce a positive reaction in any patient.

Comments

It is obvious that kum-kum prepared by alkalinising turmeric powder to change its colour to reddish-brown is fairly safe. The kum-kum available in the market presumably contains other agents which can cause contact dermatitis.

Reference

 Pasricha JS and Sethi NC: Contact dermatitis caused by cosmetics, in: Contact Dermatitis in India, Lyka Lab Publications, 1981; p 41-43.