ACNE VENENATA DUE TO BUTTER

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Multiple acne comedones and papules arranged in a linear pattern on the cutaneous margins of the vermilion surface of the upper lip developed in a 12-year-old girl. This is attributed to the topical application of butter to relieve the chapping of the lips.

Key words : Acne, Comedones, Butter,

A variety of chemicals possess the capacity to induce acne by external contact. Many are industrial hazards but some may be encountered at home. The commonly encountered acnegenic agents are chlorinated aromatic hydrocarbons, DDT, cutting oils, brilliantines, crude petrolatum, heavy coal-tar distillates, pomades, topical corticosteroids and cosmetics that contain lanolin, petrolatum, butyryl stearate, lauryl alcohol and oleic acid.1-3 Some indigenous vegetable oils in India4 and salts of fatty acids in conventional soaps are also comedogenic, if used excessively. Here we report a case in which acne comedones and papules developed on the skin border of the vermilion surface of the upper lip, following application of butter to prevent chapping of the lips.

Case Report

A 12-year-old girl was seen for multiple acne comedones and papules of two months duration on the cutaneous margin of the upper lip. These developed following application of butter (homemade) on the lips for two months, to relieve the chapping of the lips during winter. She denied application of corticosteroid ointment, lipstick or other cosmetics.

Examination revealed multiple comedones and papules in a linear pattern strictly limited to the cutaneous margin of the vermilion surface of the upper lip (Fig. 1). There were no lesions on the cheeks, forchead or other classical sites of acne vulgaris. General physical examination did not reveal any other abnormality.

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Fig. 1. Large open comedones on the cutaneous margin of the vermilion surface of the upper lip,

Histopathological study of one of the lesions revealed a typical comedonic structure. The patient was asked to stop application of butter on the lip, and a 0.05% tretinoin cream was prescribed for local application. The lesions subsided completely at the end of three months. She was asked to reapply butter on the lips and on the skin of the nose, twice daily for 2 months. She again developed acne papules and comedones on the cutaneous border of the upper lip. A few tiny follicular acne comedones and papules developed on the nose skin also. Stopping of application of butter for 3 months caused disappearance of these comedones.

Comments

Acne in the wrong site at the wrong age or with predominance of comedones should initiate an enquiry into possible external chemical factors. Predominance of comedone lesions

and unusual localization of the lesions on the lip border, without lesions of acne on its classical sites made us to suspect some external factor in the development of these lesions. History of application of butter prior to the development of skin lesions, their disappearance on stopping of application and reformation of comedones and papules on the lip border and nose on reapplication of butter suggested that the comcdones and papules in our patient were induced by contact with butter. The exact mechanism as to how butter caused acne is not clear. Butter is a triglyceride which on splitting may form fatty acids C4 to C18:2. The role of fatty acids in the formation of comedones has been studied extensively.5-7 It is possible that the fatty acids formed from butter by the action of follicular bacterial lipase, induced comedones in our case. Two cases of 'chap-stick acne' reported recently by Shelley and Shelley,8 clinically simulated our case. These authors suggested that their patients inadvertently transferred some chap-stick or vaseline to the comedone prone skin border of the vermilion surface by generous application or by sweeping movements of the lower lip over

the upper lip. In our case also, these could be the possible contributory factors that led to the development of 'butter acne.'

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