MORE (OR LESS) LIGHT ON DERMATITIS

Cutis rhomboidalis nuchae, the term applied to skin over the nape of the neck which has become thickened and thrown into creases by the action of sunlight, is not the least picturesque of the many picturesque phrases invented by our dermatological colleagues. But "peasant's skin" is probably the least disturbing of all the summer eruptions with which the industrial physician has to contend, many of which only cease with the screening mists of autumn. Disappointment with the results of treatment with light deflectant creams is liable to give place to uncritical enthusiasm when a new treatment appears. Such new therapy has been discovered in the forms of mepacrine and chloroquine administered by the oral route and seems worthy of trial.

Occupations expose large numbers of persons to actinic effects on the skin: agricultural workers, building operatives, seamen and those whose business takes them into snowfields and glaciers are liable to suffer from acute or chronic dermatitis, even occasionally from urticaria, whose business takes them into snowfields and glaciers are liable to suffer from acute or chronic dermatitis, even occasionally from urticaria, those whose business takes them into snowfields and glaciers are liable to suffer from acute or chronic dermatitis, even occasionally from urticaria, whilst tar workers complain of the "smarts" and electric furnacemen sometimes become blistered on the exposed parts. If the acute effects are painful and seldom dangerous, the long-term effects may be neoplastic and menace life. Those who already suffer from prurigo aestivalis, hydroa vacciniforme or other defects sometimes associated with the abnormal presence of hamato-porphyrin in the tissues present problems of job placement.

And finally, there is the difficult, mixed class of cases in which a person has become light sensitive by reason of contact with, or ingestion of, certain substances either by way of therapy or in the course of his work. If that person is also in contact with a skin irritant, then the diagnosis may be obscure indeed. Mitchell-Heggs gives a formidable list of substances which, either by contact or ingestion, may render the person light sensitive: coal tar, pitch, asphalt, creosote oil, rhodamine H, figs, buckwheat, India wheat, wild carrot, puncture weed, alsike clover, bunchgrass, lady's thumb, St. John's wort, bur clover, rabbit bush, the sulphonamides and acriflavine. Even meadow grass has been incriminated. We ourselves have seen violent reactions in the skin exposed to light in workers who had inhaled phenothiazine dust during the morning and indulged in sun-bathing during the lunch hour. Light sensitization is an occupational hazard in those engaged in canning parsnips. The curious streaks of pigmentation occasionally seen spreading down from the hair margin at the nape of the neck, berlocque dermatitis, are sometimes due to the light sensitizing oil of bergamot in eau-de-cologne.

The clinical appearances of acute actinic dermatitis may be indistinguishable from those of contact eczema. Yet because the mechanism of attack is so vastly different, the method of treatment must also vary. Removal from exposure to the chemical agent remains the first essential, of course; but rehabilitation should take place indoors and not by way of such favoured estival themes as the "open-air job". Following the success of mepacrine and chloroquine in the treatment of lupus erythematosus, a number of workers have obtained good results with these substances in other light sensitive eruptions. Knox et al. used mepacrine in doses of 0.1 gm. t.i.d. for a week and 0.1 gm. b.i.d. thereafter. They employed chloroquine in doses of 0.25 gm. t.i.d. for the first week and then 0.25 gm. b.i.d. Cahn et al. gave doses of 250 mg. of chloroquine daily. (This seems an excessively big dose.) Treatment in each case was continued for some weeks, but patients were allowed into bright sunshine after a fortnight. Chloroquine has one distinct advantage over mepacrine in that it does not stain the skin.

Its chemical structure resembles mepacrine, but it contains one less benzene ring.

The mode or modes of action are unknown. Mepacrine fluoresces greenish yellow and chloroquine blue and it may be that an alteration in the wavelength of the noxious ultra violet light to the harmless visible light permits the lesions to heal. Other means may be by gonadotropic or adrenotropic effects, the prevention of local changes from collagen to collagen or the stimulation of the pigment mechanism.

Side effects already noted have been few, but with prolonged administration of mepacrine lichenoid, eczematoïd and exfoliative dermatoses have been observed. It is excreted in the sweat and is stated to cause atrophy of the sweat glands. In hot climates cases of acute sweat retention are said to have occurred. Chloroquine sometimes causes blurring of vision by interference with the ability to focus the eyes; headache, pruritis and gastro-intestinal symptoms have been noted, but the effects are reversible.

References