

CAUSTIC ULCERS BY CEMENT

K. PAVITHRAN *

Summary

A case of acute necrotic ulcers on legs, produced by wet cement under occlusion is being reported.

KEY WORDS: Cement ulcers, Necrosis skin, Occupational dermatoses.

Dermatologists are quite familiar with the chronic irritant dermatitis and allergic contact dermatitis due to cement, but are less familiar with an acute toxic effect it can have under certain circumstances. We are reporting a case of acute necrotic ulcers which developed after prolonged contact with wet cement, under conditions of occlusion.

Case report

A 14 year old boy was seen in the Dermatology department in February 1982 with acute necrotic ulcers on both legs. History revealed that he had been assisting a mason 3 days back, in construction of the wall of a building, by carrying ready mixed wet cement. He had covered his legs and feet with polythene paper like a bandage, to avoid contact with cement. But these polythene bandages were loosened at the top and some wet cement got entangled in between the skin and the polythene sheets. On removal of the bandages, six hours later, he noticed circumscribed, painful and reddish areas on the back of both

legs. Next day he developed painful, thick, black eschars at the sites of contact with the cement. He was admitted to the ward and removal of the eschar revealed deep, necrotic irregular bordered ulcers (Fig. 1.) Arterial pulsations of the legs were normal.

Routine investigations of the blood and urine did not show any abnormality. Blood VDRL was non reactive. Culture of the material taken from the ulcers did not show growth of any organism. X-ray of the legs did not reveal any bone lesion. Patient was treated with antibiotics, corticosteroids, analgesics and local dressings with glycerine-magnesium sulph. The ulcers healed in 45 days' time leaving thin, atrophic and hyperpigmented scars.

Discussion

Acute caustic ulcers due to cement has not been reported in Indian Dermatological literature, so far, to the best of our knowledge. Isolated case reports of such nature are available in western literature^{1,2,3}. The circumstances under which alkaline cement causes this apparently rare complication appears to be ready mixing, its use by amateurs rather than professionals, direct skin contact, prolonged contact time and pressure on exposed

* Assistant Professor, Skin & VD.,
Medical College Hospital,
Kottayam.

Received for publication on 30-4-83



Fig. 1

Necrotic ulcers on back of legs caused by wet cement.

areas and occlusion of cement against the skin by kneeling, rubber boots or polythene sheeting⁴. In the present case occlusion of wet cement against the skin by polythene sheet is the most probable cause for development of the caustic ulcers.

References

1. Vickers HR & Edwards DH: Cement burns, *Contact Dermatitis*, 1976; 2: 73-78.
2. Hannuksela M, Suhonen R, Karvonen J: Caustic ulcers caused by cement, *Br J Dermatol*, 1976; 95: 547-549.
3. Fisher AA: Cement burns in necrotic ulcers due to kneeling on wet cement, *Cutis*, 1979; 272.
4. Rycroft RFG; *Occupational dermatoses, Recent advances in Dermatology*, Ed. by Rook A & Savin J, Churchill Livingstone, London, 1980, p. 185.