

Figure 1. a. Chest radiograph on admission demonstrating the signs of left upper lobe collapse with an apparent left hilar mass and volume loss. b. Normal chest radiograph following treatment.

necessary. This potentially reduces patient anxiety, unnecessary radiation exposure and risk of contrast allergy, improves radiology service capacity and reduces unnecessary health-care costs. **BJHM**

Webber M, Davies P (1981) The Luftsichel: an old sign in upper lobe collapse. *Clin Radiol* **32**(3): 271–5

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IMAGES IN MEDICINE

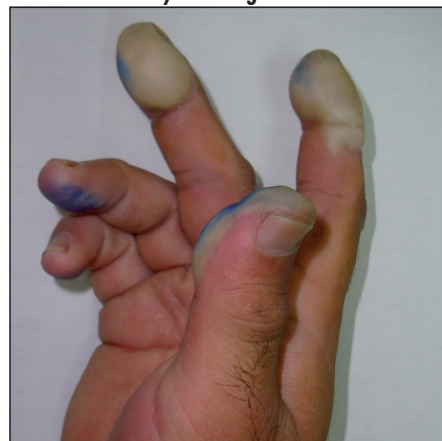
Hydrofluoric acid burn

A 40-year-old glass etching worker presented to the emergency department with a hydrofluoric acid burn. The patient was complaining of increasing pain in the affected fingers. His physical examination showed blisters on the right first, second and third fingertips in addition to mild staining with dye which had transferred from a towel (*Figure 1*).

The blisters were washed with plenty of water, deroofed, and a 2.5% calcium-

gluconate gel was prepared (by mixing 25 ml of 10% calcium-gluconate solution with 75 ml of water-soluble lubricant) and applied by the patient wearing a surgical

Figure 1. Blisters on the three fingertips on the right hand caused by a hydrofluoric acid burn in addition to mild dye staining.



glove filled with the gel. After a few minutes, the pain was dramatically relieved. Electrocardiogram, serum electrolytes, and radiographic imaging was normal.

Although hydrofluoric acid is a weak acid, the free fluoride ion results in calcium chelation which leads to cellular death. Patients can have a tremendous amount of pain with seemingly benign wounds. Severe injuries may result in severe systemic hypocalcaemia, hypomagnesaemia, hyperkalaemia, acidosis and ventricular dysrhythmias. Treatment options include calcium gel (in minor burns), intradermal calcium (5%) injection up to 0.5 ml/cm² (for larger burns), Bier block, and intra-arterial 2% calcium-gluconate for distal refractory burns (Ryan et al, 1997). **BJHM**

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