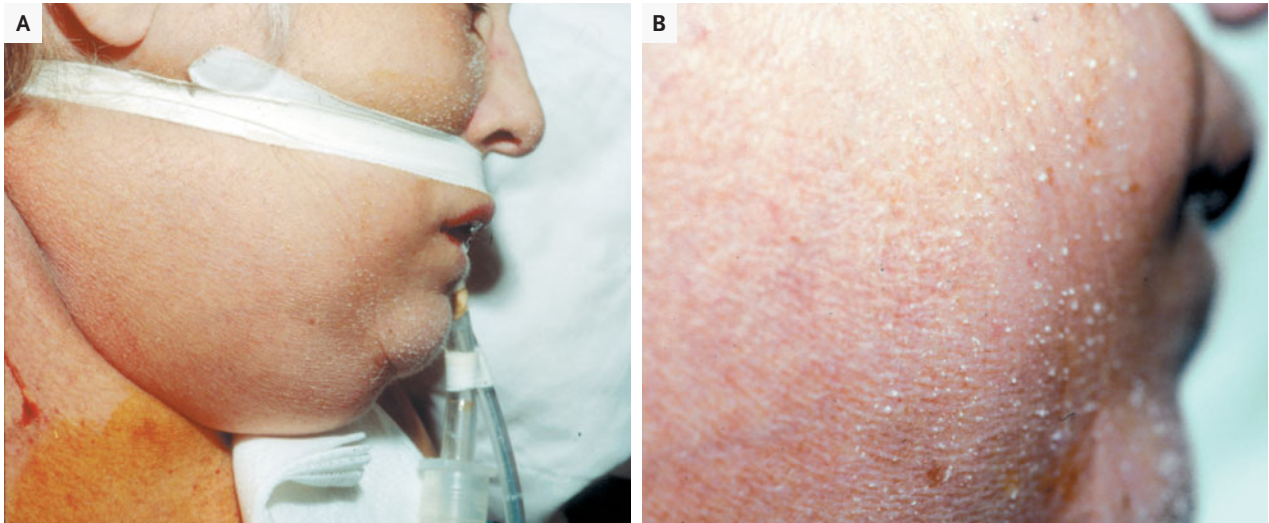


IMAGES IN CLINICAL MEDICINE

Uremic Frost



A 57-YEAR-OLD WOMAN WITH HYPERTENSION AND CHRONIC RENAL INSUFFICIENCY who had refused dialysis for two years was found in respiratory distress after one week of upper respiratory symptoms due to a viral infection. Before admission to the hospital, she had an asystolic cardiac arrest but was resuscitated by emergency medical technicians. She was admitted to the intensive care unit and required vasopressor support. On physical examination, diffuse deposits of tiny white crystalline material were observed on her skin (Panels A and B). Initial laboratory studies showed a blood urea nitrogen level of 208 mg per deciliter (74.3 mmol per liter), a creatinine level of 15 mg per deciliter (1326 μ mol per liter), a bicarbonate level of 5 mmol per liter, an anion gap of 26, an arterial pH of 6.74, and an arterial partial pressure of carbon dioxide of 50 mm Hg. She was found to have *Staphylococcus aureus* pneumonia, presumably due to an antecedent influenza infection. Aggressive care measures were withdrawn after consultation with the patient's family, and the patient died. Uremic frost is an uncommon dermatologic manifestation of profound azotemia and occurs when urea and other nitrogenous waste products accumulate in sweat and crystallize after evaporation.

Copyright © 2005 Massachusetts Medical Society.

Stephen R. Walsh, M.D.C.M.

Massachusetts General Hospital
Boston, MA 02114

Nereida A. Parada, M.D.

Tulane University School of Medicine
New Orleans, LA 70112