Patients with chronic leg ulcers show diminished levels of vitamins A and E, carotenes, and zinc.

Rojas AI, Phillips TJ.

Boston University School of Medicine, Department of Dermatology, Boston, Massachusetts, USA.

BACKGROUND: Nutrition plays an important role in the wound healing process, particularly in the elderly.

OBJECTIVE: Comparison of nutritional serum indices between patients with chronic leg ulcers and an age-matched control population.

METHODS: Seventeen patients with chronic leg ulcers (age range 47-90) were studied. A panel of vitamins (A, B1, B2, B6, B12, E), trace elements (zinc, copper, iron), folate, and carotene levels were screened on fasting blood samples. Study data were compared with data obtained from the nutritional status survey (NSS) in the greater Boston area.

RESULTS: Significantly lower levels of vitamin A (P < 0.0001), zinc (P < 0.0001 men, P = 0.027 women) and carotenes (P = 0.0023 men, P = 0.0067 women) were found in chronic ulcer patients. Significantly lower levels of vitamin E (P < 0.009) were observed in the men with a tendency to lower levels in women.

CONCLUSION: Elderly Bostonian patients with chronic leg ulcers have low levels of vitamins A and E, carotenes, and zinc. Nutritional deficiency or increased consumption of nutritional elements in these patients may influence wound healing rates.

PMID: 10491041