The effectiveness of oral nutritional supplementation in the healing of pressure ulcers.

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OBJECTIVE: To investigate the effectiveness of an oral nutritional supplement that is rich in protein and enriched with arginine, vitamin C and zinc on the healing of pressure ulcers.

METHOD: Thirty-nine patients with grade III or IV pressure ulcers were enrolled into this open intervention study. Subjects received an oral nutritional supplement daily for three weeks. Wound area and the wound condition of the ulcers were assessed weekly.

RESULTS: After three weeks of supplementation, median wound area reduced significantly (p < 0.001) from 23.6 cm² (1.6-176.6 cm²) to 19.2 cm² (1.2-132.7 cm²), a reduction of 29%. Median healing of wound area was 0.34 cm² per day, taking approximately two days to heal 1 cm². Within three weeks the amount of exudate in infected ulcers (p = 0.012) and the incidence of necrotic tissue (p = 0.001) reduced significantly.

CONCLUSION: Nutritional intervention in the form of a specific oral nutritional supplement resulted in a significant reduction in wound area and an improvement in wound condition in patients with grade III and IV pressure ulcers within three weeks.

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