Aloe Vera Gel Gloves (5/03)

Evaluation of aloe vera gel gloves in the treatment of dry skin associated with occupational exposure.

An innovative dry-coating technology has produced a new concept - an examination glove that gradually delivers aloe vera gel to the skin of the gloved hand. Powder-free latex examination gloves with aloe vera were tested in women in a Chinese factory with currently active, clinically dry skin (scaling and with or without erythema) associated with occupational exposure. An open, contralateral comparison study evaluated the efficacy of repeated aloe vera glove use (i.e., 8 hours/day) to one hand versus no glove use to the opposite hand during 30 days, followed by 30 days rest, followed by 10 days of repeated use. Standardized photographs at baseline, during, and at the end of the study documented the skin condition of the participants' dorsal hands. Mean time to noticeable improvement in skin quality for the aloe vera glove hand was 3.5 days whereas marked improvement in skin quality was 10.4 days for the aloe vera glove hand. No improvement was detected for nonglove hands.

Dry-coated aloe vera gloves that provide for gradual delivery of aloe vera gel to the skin produced a uniformly positive outcome of improved skin integrity, decreased appearance of fine wrinkling, and decreased erythema in the management of occupational dry skin and irritant contact dermatitis.

DIS Comment: The use of topical aloe vera to alleviate irritated and dry skin is well reported, as is the use of aloe vera to treat human burns and skin wounds. Although the sample size in this study is small (n=29), it demonstrated that individuals with occupationally-related dry skin and irritant contact dermatitis showed a marked improvement in skin quality when using aloe vera gel gloves. Dental health-care personnel who frequently suffer from occupationally-related dermatitis (e.g., from frequent hand hygiene and glove use) may benefit from using a glove that provides for prolonged and continual delivery of aloe vera to the skin.