

Wound Healing with a New Growth Factor Formula

Sir,

Venous ulcers continue to be a major socioeconomic burden. The prevalence has been estimated to be as high as 0.5% of the total population. The etiology of these ulcers has not been fully elucidated. At present, the ulcers are normally treated at out-clinics or by district nurses, costing an enormously large amount of money. Many treatment modalities are currently available for wound healing, such as dressings, foams, creams and ointments. Normally, patients are also treated with compression bandages. However, many of the wounds continue to be a burden for patient and doctor.

The culturing of human cells has been developed in an effort to provide a biological covering of epidermal cells over extensive burn wounds (1). The optimal culture medium gel for keratinocytes contains amino-acids, vitamins, sugars, inorganic salt, trace elements, growth hormone, insulin, triiodothyronine and transferrin. Recently a new wound healing gel, "Cariel Dermal" (Life Medical Sciences, New York, USA), has been developed containing all these elements. This gel has been demonstrated to be effective in accelerating the wound healing process in animal studies and unrandomized human studies (2). We set up a well-controlled trial to evaluate the effects of

this new formula. In this pilot study we treated two groups: one with the new formula and one with the best standard treatment for leg ulcers, which is in our opinion Comfeel hydrocolloid dressings (Coloplast, Humlebaek, Denmark). Dressing changing took place every other day and the patients were treated at home. Each ulcer was diagnosed as a venous leg ulcer by Doppler sonography and light-plethysmography. Each patient was furthermore treated with standard non-elastic compression bandages. Evaluations took place before treatment, at 4 and 8 weeks. Standardized slides were used at each visit. They were processed by a specially designed computer program to analyse the progress in wound healing. The total amount of patients needed to reach statistical significance was calculated at 60 patients in each group.

So far we have treated 10 patients in the study group and 10 in the control group. After 4 and 8 weeks of treatment the study group already showed a mean decrease in wound surface of 201 and 340 mm² (s.d. 211 and 281). In the control group these figures were 164 and 252 mm² (s.d. 147 and 326). Some patients showed a mild maceration around the wound edge, which improved in time. No other side-effects were seen.

The new growth factor gel Cariel Dermal seems to be a new

promising form of treatment in the healing of venous leg ulcers and at least as effective as the best standard treatment.

REFERENCES

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