

**THE EFFECTS OF UNGUENTUM LYMPHATICUM ON SKIN
IN PATIENTS WITH OBSTRUCTIVE LYMPHEDEMA OF
THE LOWER EXTREMITIES**

W.L. Olszewski, U. Kubicka

Department of Surgical Research & Transplantology, Medical Research Center, Polish Academy of Sciences, Warsaw, Poland

ABSTRACT

Obstructive lymphedema of extremities in humans is characterized by swelling of tissues with lymph stasis and inflammatory infiltrates in skin and subcutaneous tissues. Treatment of the inflammatory component requires application of antiinflammatory drugs. We studied the effect of topical application of Unguentum Lymphaticum (UL) containing antiphlogistic compounds (digitalis, calendulin, hyoscyamine, colchicine and podophyllin) on lymphedematous skin in 33 patients with stage II postinflammatory obstructive lymphedema. A three-week treatment of swollen legs with UL brought about stimulation of epidermal cells with proliferation of keratinocytes, increased numbers of Langerhans cells, accumulation of macrophages in the dermis and activation of infiltrating cells and endothelia. Besides some foci of acanthosis, no degenerative changes were observed in the skin in patients treated for 12 weeks and no changes were observed in the placebo treated groups. Immunohistochemical evaluation of biopsy specimens of inguinal lymph nodes in patients treated for 12 weeks revealed reactive granulocyte and macrophage accumulation in the cortical and paracortical areas. Components of UL inhibited stimulation of blood mononuclear cells in in vitro cultures. UL did not change the spectrum of calf skin bacterial populations. The nonspecific stimulation of skin-associated lymphoid tissue and putative elimination of factors responsible for lymphedematous skin inflammation appears to be responsible for the beneficial clinical effect of UL on legs with lymph stasis.