

THE EFFECTIVENESS OF LONG-ACTING PENICILLIN (PENIDUR) IN PREVENTING RECURRENCES OF DERMATOLYMPHANGIOADENITIS (DLA) AND CONTROLLING SKIN, DEEP TISSUES, AND LYMPH BACTERIAL FLORA IN PATIENTS WITH “FILARIAL” LYMPHEDEMA

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ABSTRACT

Dermatolymphangioadenitis (DLA) is a common and serious complication of so-called “filarial” and bacterial non-filarial lymphedema of the limb, affecting skin, lymphatics and lymph nodes. In our previous studies, we demonstrated that more than 60% of patients revealed presence of bacterial isolates in deep tissues, tissue fluid and lymph from the lymphedematous limbs. The question remained open whether elimination or suppression of bacteria dwelling in lymphedematous tissues by administration of low doses of penicillin for long time periods would prevent recurrence of DLA attacks. In this study, we retrospectively evaluated a self/community-selected group of patients with lymphedema of the lower limbs with respect to the efficacy of long-acting penicillin in preventing episodes of DLA. There were no microfilariae or anti-filarial antibodies detected in the investigated group. The questions we asked were: a) how effective is the benzathine penicillin in preventing recurrences of DLA attacks and b) how does its long-term administration influence the bacterial spectrum of leg skin, deep tissues, lymph and lymph nodes and sensitivity to antibiotics. Two randomly selected groups of patients, receiving and not receiving penicillin during the same period of time, were compared. Evidently lower recurrence rate of DLA was observed in the treated group ($p < 0.002$). There was increased prevalence of cocci and gram-positive bacilli with a concomitant decrease of gram-negative bacilli on the foot and calf skin surface. Simultaneously, decreased prevalence of gram-positive cocci and gram-negative bacilli isolates in limb deep tissues and lymph was seen. No resistance to penicillin and other tested antibiotics developed in isolates from the skin surface, deep tissues and lymph. We conclude that long-lasting penicillin is effective in preventing recurrent DLA attacks.