EPISODIC DERMATOLYMPHANGIOADENITIS (DLA) IN PATIENTS WITH LYMPHEDEMA OF THE LOWER EXTREMITIES BEFORE AND AFTER ADMINISTRATION OF BENZATHINE PENICILLIN: A PRELIMINARY STUDY

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ABSTRACT

Dermatolymphangiodenitis (DLA) is a common and serious complication of obstructive peripheral lymphedema. The clinical characteristics of acute DLA are local tenderness and erythema of the skin, sometimes red streaks along the distribution of the superficial lymphatics and enlarged inguinal lymph nodes. Systemic symptoms include malaise, fever and chills. In its subacute or latent form, only skin involvement is observed. Each episode of DLA is commonly followed by worsening of leg swelling. Numerous clinical studies suggest that administration of antibiotic drugs interrupt the acute episodes and prevent their recurrence. We investigated the clinical course of lymphedema with respect to the prevalence of DLA in patients receiving injections of long-acting penicillin (benzathine penicillin). Forty-five randomly selected patients with obstructive lymphedema of the lower limbs were included in an open clinical trial. The inclusion criteria was stage II-IV lymphedema of postsurgical, posttraumatic, and postdermatitis type with at least 3 previous episodes of DLA. Benzathine penicillin (PCN) was given after the last presenting episode of DLA in a dose of 1,200,000 u, intramuscularly at 3-week intervals, for at least one year. Each patient was reevaluated at 3-month intervals. They were instructed in early diagnosis of DLA and reported promptly to the responsible senior surgeon with prodrome symptoms of recurrent DLA. The duration of lymphedema before initiation of therapy was 7 months to 40 years and the frequency of DLA was 1-6 episodes per year. PCN administration lasted for at least one year but was extended in all patients because of the tendency for recurrence of DLA after cessation of PCN injections. In 26 of these patients, PCN administration extended to over 5 years and in 2 over 10 years. Recurrent episodes of DLA occurred in the PCN-treated group during one year follow-up in only 4 of the 45 patients (9%). The frequency episodes in 3 patients with recurrent DLA was 1-2/year; in one patient, no positive effect of PCN therapy was observed. There were no apparent side effects of long-term PCN therapy.

These data, although evaluated without a placebo group, suggest that long-term PCN administration decreases the frequency of DLA attacks and furthermore provide justification for
carrying out a double-blind randomly placebo-controlled clinical trial of the efficacy of prophylactic antibiotic drug treatment in forestalling DLA episodes.