

SCENAR THERAPY FOR LYMPHEDEMA

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ABSTRACT

SCENAR standing for Self-Controlled Energo Neuro-Adaptive Regulator was first invented in mid 80s. The goal of therapy for lymphedema is lymphatic drainage. We investigated the usefulness and effectiveness of SCENAR therapy in patients with lymphedema. SCENAR therapy was performed in 28 patients with lymphedema. All patients were female and were performed radiation treatment due to breast cancer in 7 patients, cervical cancer in 13 patients, and ovarian cancer in 8 patients. The mean age was 53.7 years (range: 37-65 years). The mean frequency of SCENAR therapy was 4 times a week and the mean duration time per each treatment -was 8 minutes. The mean follow up period was 7 months (range: 3 months-18months). The circumference of affected extremities was measured before and after treatment. The overall improvement of lymphedema was 79% and the pain associated with lymphedema also improved in 85 % of patients. This study suggested that the SCENAR device impulse helps fluid come out of the lymphatic system and improves the microcirculation. SCENAR device also eliminates inflammatory process in the lymph nodes. Therefore, - SCENAR therapy would be very useful method to deal with lymphedema.

INTRODUCTION

Lymphedema is a debilitating progressive condition with no known cure. The underlying problem is lymphatic dysfunction, resulting in an abnormal accumulation of interstitial fluid containing high molecular weight proteins. It is usually observed following breast cancer surgery, particularly among those who undergo radiation therapy following axillary lymphadenectomy. In a disease state, the lymphatic transport capacity is reduced. This causes the normal volume of interstitial fluid formation to exceed the rate of lymphatic return, resulting in the stagnation of high molecular weight proteins in the interstitium. Surgical treatment is palliative, not curative, and it does not obviate the need for continued medical therapy.

SCENAR standing for Self Controlled Energo Neuro Adaptive Regulator was first invented in Russia in mid 80s. We experienced the clinical benefit provided by SCENAR therapy for patients with lymphedema and demonstrated the effectiveness of SCENAR therapy.

METHODS

SCENAR therapy was performed in 28 patients with lymphedema. All patients were female and were performed radiation treatment due to breast cancer in 7 patients, cervical cancer in 13 patients, and ovarian cancer in 8 patients. The mean age was 53.7 years (range: 37-65 years). The mean frequency of SCENAR therapy was 4 times a week and the mean duration time per each treatment was 8 minutes. The mean follow up period was 7 months (range: 3 months-18months). The circumference of affected extremities was measured before and after treatment.

RESULTS

The overall improvement of lymphedema was 79% and the pain associated with lymphedema also improved in 85 % of patients.

DISCUSSIONS

Lymphedema is a notoriously debilitating progressive condition caused by damage or removal of regional lymph nodes through surgery, radiation, infection, or tumor invasion. The goal of therapy is lymphatic drainage. SCENAR device generates electrical impulses that are physiologically similar to neuroimpulses. In response to a SCENAR impulse, reflex biofeedback proceeds at real time and biological speed. By continuously using biofeedback, the SCENAR modifies each successive input signal to either amplify or dampen the form of the pathological signals that exist in the body. Although the pathophysiology of lymphedema is still unclear, it has been reported that protein and fluid accumulation initiates a marked inflammatory reaction in the interstitium. Macrophage activity is increased, resulting in destruction of elastic fibers and production of fibrosclerotic tissue. The result of this inflammatory reaction is a change from the initial edema to the brawny nonpitting edema characteristics of lymphedema. This study suggested that the SCENAR device impulse helps fluid come out of the lymphatic system and improves the microcirculation. SCENAR device also eliminates inflammatory process in the lymph nodes. Therefore, SCENAR therapy would be very useful method to deal with lymphedema.

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