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Significance of hormone replacement therapy in the experience of Lymphedema in breast cancer survivors

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Little is known about the relationship between hormone replacement therapy and Lymphedema (LE), the accumulation of lymph in soft tissue with accompanying swelling that affects 20-40% of breast cancer survivors, mainly in the upper extremities. It is known that hormone replacement therapy (HRT), specifically estrogen plus progestin, used to treat menopausal women can contribute to the onset of invasive breast cancer. This study is aimed to examine the possible relationship between HRT with the occurrence and severity of LE in breast cancer patients. A retrospective chart review was conducted on medical records of 97 female participants undergoing breast cancer treatment. Variables identified for investigation included: hormone replacement therapy history, surgical procedure, radiation therapy, anti-estrogen therapy, chemotherapy, occurrence of LE as diagnosed by a medical professional, time till onset of LE from date of surgery, and treatments used to manage the condition. A review was also conducted over patient surveys in order to assess the severity of the illness as reported by the patients. Data showed that 21.6% of the 97 patients included in this review experienced LE diagnosed by a medical professional after treatment for breast cancer. Of those patients with medically diagnosed LE, 43% previously used HRT, while 51.3% of patients without LE had previously used HRT. From these data, several trends were assessed in the relationship between HRT, cancer treatment modalities and medical diagnosis of LE. Data from the surveys suggested that medically diagnosed LE patients with a history of HRT may experience a protective effect because of their collective history of HRT and use of certain cancer treatments. This study suggests that there may be a link between breast cancer patients' experiences following Lymphedema and their history of hormone replacement therapy and other cancer modalities.