



LASERS

EFFECT OF LASER THERAPY ON QUALITY OF LIFE IN PATIENTS WITH RADIATION-INDUCED BREAST TELANGIECTASIAS

A Rossi⁽¹⁾ - N Blank⁽²⁾ - K Nehal⁽²⁾ - E Lee⁽²⁾

Memorial Sloan Kettering Cancer Center, Dermatology, New York, United States⁽¹⁾ - Mskcc, Dermatology, Ny, United States⁽²⁾

Introduction: Radiation dermatitis can have cosmetic, emotional, and functional sequelae in breast cancer (BC) patients.

Objective: To evaluate the effects on quality of life (QoL) in breast cancer patients with chronic radiation dermatitis treated with laser monotherapy.

Materials and Methods: A prospective, IRB approved, study was conducted at the Memorial Sloan Kettering Cancer Center of BC patients with chronic radiation dermatitis. Subjects completed HR-QOL questionnaires before and after laser monotherapy therapy for radiation induced breast telangiectasias. After informed consent, prior to and after completion of treatment all patients completed the Skindex-16 and Breast-Q Adverse Effects of Radiation QoL questionnaires. Median HR-QOL scores before and after therapy were reported and differences were calculated using the Wilcoxon Signed-Rank Test. Patients were treated with a 595nm pulsed dye laser at 4- to 6-week intervals, with percent telangiectasia clearance and adverse events recorded at each visit.

Results: Twenty-two female patients (mean 56.1 years) were enrolled. 13/21 (62%) exhibited telangiectasias across the décolletage, axilla, and breast. Nine patients completed follow-up questionnaires. Patients improved significantly in emotional and functional Skindex-16 domains (mean pre-treatment vs. post-treatment emotional: 42.3 vs. 13.2, $p=0.008$; functional 15.6 vs. 5.9, $p=0.0499$). Specific physical and cosmetic concerns common to radiated breast skin also bothered patients less (mean pre-treatment vs. post-treatment Breast-Q: 31.9 vs. 10.4, $p=0.000085$). The 13 patients who failed to complete follow-up questionnaires were similar to those who did fill out pre-treatment surveys in age (56.4 vs. 55.9 years, $p=0.89$), mean baseline Skindex-16 (28.8 vs. 26.9, $p=0.81$), and mean baseline Breast-Q (30.8 vs. 31.9, $p=0.88$). Common adverse events were transient post-treatment pain and redness.

Conclusion: Patients experiencing chronic radiation dermatitis and radiation induced breast telangiectasias had a significant deficit in QoL arenas. The use of the laser monotherapy





not only improved the physical condition, but significantly improved patient's health related QoL.

