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PHOTOBIOMODULATION AND MANUAL LYMPH DRAINAGE FOR THE TREATMENT OF NIPPLE NECROSIS IN BREAST CANCER PATIENT: TWO CASE REPORTS

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Introduction: Breast cancer is the most common malignant neoplasm among women in the world and in Brazil, accounting for approximately 28% new cases each year. Recently, breast reconstruction after mastectomy with preservation of the nipple has been an alternative breast cancer treatment. However, despite its efficacy and esthetic superiority, the preservation of the nipple has been associated with several complications in the postoperative period. The therapy of photobiomodulation, formerly known as low-level laser therapy, has been demonstrated to promote repair of tissues by cellular repair biostimulation, angiogenesis, and anti-inflammatory effects. These characteristics suggest a potential role for the repair of chronic wounds and may be applicable in the treatment of necrosis. **Objective:** This study aimed to observe the effects of physiotherapeutic intervention through photobiomodulation therapy in two patients with nipple necrosis after mastectomy. **Methods:** Two Brazilian females with necrosis of more than 40% of the nipple on the right breast after breast mastectomy and reconstruction were referred to physical therapy (PT). PT sessions were composed of manual lymph drainage, manual therapy, and exercises of strength and flexibility, followed by photobiomodulation. Patient 1 received laser therapy with a laser at 660 nm, 3 joules per point every 1 cm. The device used was the Laser Therapy DMC, with a power output of 100 mw. The therapy was implemented 12 times in total, and a reevaluation was performed monthly until 12 months of follow-up. Patient 2 received led therapy at 660 and 850 nm, 3 joules per point every 2 cm. The device used was the Ledtherapy Cosmedical, with a power output of 5 mW, for a total of 24 treatments, and follow-up was performed until 6 months post-therapy. **Conclusion:** Photobiomodulation was helpful for wound healing. Confirmation of the sustained effects of photobiomodulation was shown in a 6-month follow-up.

Keywords: Breast cancer. Low-level laser therapy. Photobiomodulation.