**The use of photobiomodulation in the management of radiotherapy side effects: Case series.**

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Abstract:

It was predicted that there would be 670,000 new cancer cases worldwide in 2020–2022. It is known that the most common treatments instituted are chemotherapy, radiotherapy, and surgery. However, these treatments have undesirable side effects such as radiodermatitis (RD). In fact, it is estimated that the prevalence of possible side effects after radiotherapy is 80 to 90%. Radiotherapy complications are associated with a negative impact on the quality of life of patients. Few supportive care measures are available for such complications. In this way, the management of these side effects has been an object of study in the literature until today. In the other side, Photobiomodulation (PBM) has an important role in wound repair and tissue regeneration as it influences the different phases of lesion resolution, including the inflammatory phase, the proliferative phase, and the remodeling phase. In this way, the objective of this study is to evaluate the application of PBMT in the treatment of patients diagnosed with acute radiodermatitis induced by radiotherapy after breast cancer treatment. This is a case series report protocol in which the data will be derived from the medical records of all breast cancer patients with RD degree 2 or 3 treated at the Laser Therapy Outpatient Clinic in a university hospital followed from September 2022 until August 2023. The data collected comes from the patient's medical record. The outcomes are the size lesion, Visual Analogic Scale (VAS) and the Radiation Therapy Oncology Group Scale (RTOG) in the pre and post-FBM therapy moments. The data will be submitted to a statistical analysis and will be discussed. Data with positive or negative results will be reported.

Reference

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