## THIRD DEGREE BURN WITH A TYPOGRAPHIC MACHINE AND ITS EVOLUTION THROUGH SPECIALIZED CARE: A CASE REPORT



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Objective: To report a case of a third-degree burn and its evolution through integrated care and the application of photobiomodulation therapy at a wound clinic in western Santa Catarina.

**Method:** This is a case report. Male, 21 years old, victim of a burn to the left hand with a typographic machine on 12/09/2024. He went to an emergency medical service where he was treated with silver sulphadiazine and referred for outpatient follow-up. On 13/09/2024, he began to be monitored by a multidisciplinary team, which found a third-degree burn on the back of his left hand and deep second-degree burns on his 2nd, 3rd and 4th fingers. A plastic surgeon was contacted and the patient was referred for surgical debridement and grafting. Patient returned on 27/9/2024, with 100% adherence of the laminar graft and the presence of stitches. Cleaning was carried out with SF 0.9% + application of photobiomodulation therapy, and rayon soaked with essential fatty acids, gauze and tubular mesh. The patient was followed up every six days and showed progressive improvement in graft adherence and the healing process. At each appointment, the patient was assessed, cleansed, scabs removed, laser therapy applied and the initial coverings were maintained with the inclusion of hydrogel.

**Results:** Follow-up was carried out for 42 days and showed a reduction in the areas of injury, an increase in vascularized tissue and healing without any significant loss of mobility. The patient was discharged from outpatient care with the lesions healed, and was instructed to maintain skin care and physiotherapy follow-up.

**Conclusion:** Specialized, multi-professional care, combined with adjuvant therapies such as photobiomodulation, are essential for positive results in the treatment of patients with burns.

## Photographic records of the evolution of the case













I have no conflict of interest!