

Association of technological therapies for the treatment of necrotizing fasciitis



Anna Flávia Figueiredo Fernandes², Natália Antunes Souza¹, Walton Tedesco², Paulo Marcel Yoshii², Rogério Aleksander Sakuma¹, Everton Thiarles dos Santos¹; Gabriela Volante Viza²; Vitor Luigi Trento²

¹Centro Brasileiro de Medicina Hiperbárica e Lesões Complexas – CEBRALE

²Irmandade Santa Casa de Londrina – ISCAL

Objective: To report the therapeutic success in the management of a case of necrotizing fasciitis, with emphasis on the association of advanced technological therapies.

Method/Case report: A 65 years old male patient with no known comorbidities was admitted to the emergency room of a tertiary hospital in Londrina (PR) on 12/28/2024, complaining of an infection in his right leg that had started approximately seven days earlier. Referred by an emergency care unit, he underwent surgical debridement with fasciotomy due to pyomyositis with abscess on 01/02/2025, keeping the wound open with a simple dressing. On the same date, the Hyperbaric Oxygen Therapy (HBOT) protocol was started. On 01/10/2025, given the progression of the condition, a new debridement was performed, and Negative Pressure Therapy (NPT) was introduced with a pressure of -120 mmHg. The patient underwent 7 full NPT changes and completed 30 HBOT sessions, with favorable evolution of the wound bed, allowing skin grafting. On 2/24/2025, he presented a new infection, requiring hospitalization, intravenous antibiotic therapy and a new skin graft on 2/27/2025, maintaining OHB sessions.

Results: The donor and recipient areas of the graft showed excellent healing 30 days after the procedure. The patient continues to be monitored with antibiotic therapy and HBO due to an infectious process in the contralateral lower limb, but without open lesions at the moment.

Conclusion: The combination of Hyperbaric Oxygen Therapy and Negative Pressure Therapy proved to be effective in the treatment of necrotizing fasciitis, promoting significant tissue improvement, infection control and skin graft viability. The case reinforces the importance of the multimodal approach and the use of technological therapies as fundamental strategies in the management of severe soft tissue infections.

Key words: Necrotizing fasciitis; Hyperbaric oxygen therapy; Negative pressure therapy; Skin graft.



Figura 1 - 10/01/2025



Figura 2 - 11/02/2025



Figura 3 - 06/03/2025



Figura 4 - 05/04/2025

"I have no conflict of interest"

annafigueiredoferndes@gmail.com

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