

## Necrotizing Fasciitis (NF) Treated with Fasciectomy and Surgical Decompression Followed by Application of Dermal Substitute and 3 Cycles of Negative Pressure Therapy: Case Report of Complete Healing in a Asian 54-Year-Old Septic Patient

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**Background:** Necrotizing fasciitis is a rapidly progressive, aggressive bacterial infection that causes extensive necrosis of the subcutaneous tissue and fascia. NF can be type I (polymicrobial, most common) or type II (monomicrobial). Early diagnosis is mandatory because delay in starting treatment negatively affects the results. In 80% of cases, it is a direct consequence of altered skin integrity. Primary therapies include the use of broad-spectrum antibiotics and surgical removal of infected tissue; regenerative medicine as Negative Pressure Wound Therapy (NPWT) can provide support in the final stage of healing.

**Case History:** A 54-year-old asian patient came to the emergency room in severe septic state with wet gangrene of the left lower limb extended to the lateral leg region. Transferred to a dedicated ward, he received broad-spectrum antibiotic treatment and a fasciectomy with surgical decompression. After application of the dermal replacer and three cycles of NPWT, complete resolution of the condition was achieved.

**Discussion:** Emergency surgical treatment associated with antibiotics first broad-spectrum and then targeted are necessary in the fast management of necrotizing fasciitis. Once sepsis has been managed, it is possible to opt for treatments such as NPWT to ensure tissue regeneration with optimal results.

### References

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**Figure**

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