

Topical Therapy in the Management of Classic Pyoderma

Gangrenosum with Multiple Lesions: A Case Report



Shaiane Cecília da Silva
Lina Monetta
Elaine Cristina Salzedas Muniz

Objective	Method
To describe the topical therapy approach used in the management of wounds resulting from the classic form of pyoderma gangrenosum	An observational case report study conducted according to the Consensus-based Clinical Case Reporting Guideline Development (The CARE Guideline)

I – Initial assessment

Identification

Female, 36 Years old

Medical history and comorbidities

Controlled pasoriasis; denis previous history of pathergy

History of presente illness

Bitten by brown recluse spider in June 2022, which progressed to local necrosis

Residing in another country Without a supportnetwork; irregularuse of medications and drugs

Referred by infectious Disease specialist on 23 June 2023

Fisical Examination

Conscious and oriented, Independent in basic activities of dially living, eutrophic but with nutriente-poor diet,reports pain score of 8/10 on the

Numerical Verbal Scale

Diagnostic evaluation

Pyoderma gangrenosum diagnosed via biopsy in October 2022

New biopsy and tissue culture of lesions: Burkholderia cepacea (June 2023)

Wound Assessment

Lesions on lower limbs with cavernous wund beds containing nodules and necrotic tissue, abundant exsudate, violaceous, painful and undermined edgeswhit purulent exudate accumulation, foul odour, perlesional erythema and local warmth

Lower libs with good peripheral perfusion, palpable pulses, no edema, warm to touch

Nursing Intervention Plan

- 1- Proper use of medications
- 2- Care regarding appropriate nutrition
- 3- Adequate hygiene and rest
- 4- Support for adaptation to activities of daily living
- 5- Referral to a specialised medical team

III- Follow-up consultations and evalution

Clinical progression of the lesions

Changes in exudate characteristics: quantity, odour, and appearance

Wound bed aspects

Management: moisture balance of the Wound bed, microbial control, and pain management through the use of absorvente, non- adherent, and silver-impregnated dressings

Anterior third of the right thigh Posterior third of the right thigh Left thigh



Anterior third of the right thigh Posterior third of the right thigh Left thigh Posterior third of the left calf



II- Initial interventions performed

Cleansing of the lesions using polyhexamethylene biguanide solution, followed by coverage with a non-adherent mesh impregnated with essential fatty acids and silver, and a layer of activated charcoal enhanced with silver. The choice of activated charcoal was aimed at controlling the excessive exudate and foul odour characteristic of the lesions. To prevent adherence to the wound bed, the non-adherent mesh was maintained during the first seven days in the less exudative areas

Other Interventions

Hyperbaric oxygen therapy

Adjustment of systemic medications: antibiotic therapy and opioid-based analgesia (tramadol, morphine hydrochloride, and cannabidiol)

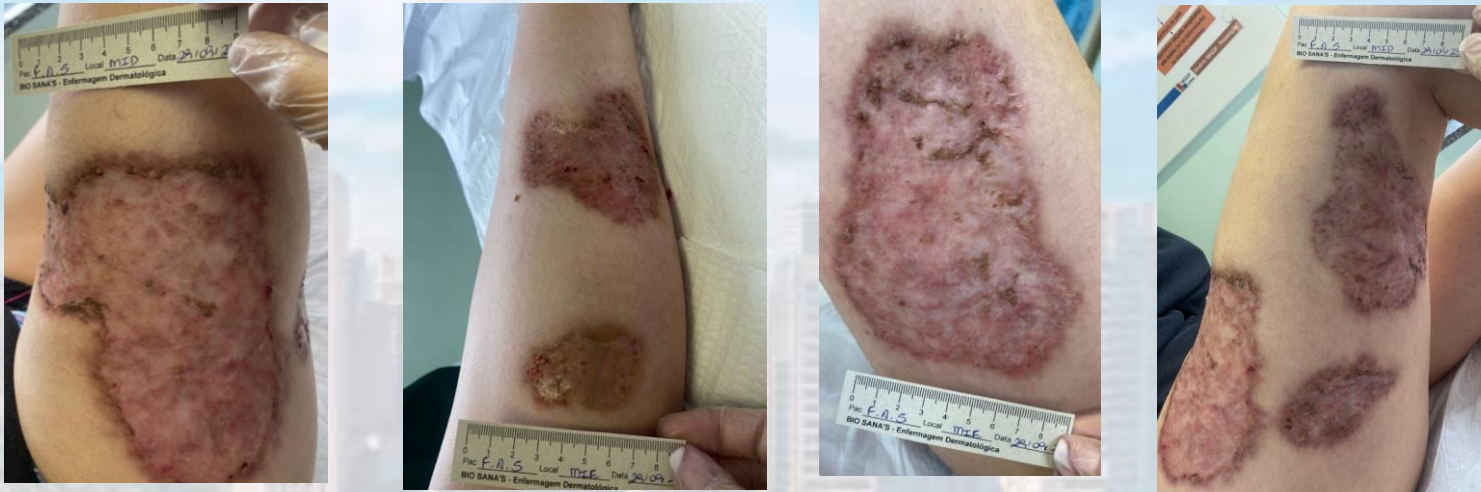
Initiation of treatment with the immunobiological Upadacitinib (July 2022)

IV- Clinical outcome

A total of twenty-five dressing changes were performed until the patient was discharged in September 2023, with complete ephiteliatisation of the lesions

The patient was advised to maintain silicone Dressing to protect the affected áreas and promote aesthetic healing

Anterior third of the right thigh Posterior third of the right thigh Left thigh Posterior third of the left calf



Conclusion

Pyoderma gangrenosum is a rare, painful neutrophilic dermatosis with rapid progression and limited treatment guidelines. In this case, combined topical, systemic, and hyperbaric therapies, plus multidisciplinary education, led to full healing and better quality of life. The case exposes a gap in evidence-based topical care and stresses the need for further research

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I have no conflict of interest

shaiane@biosanas.com.br

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