

Epidemiology of Complex Wounds with Delayed Healing in a Stomatherapy Outpatient Clinic in São Paulo, Brazil



Erika Carvalho de Sousa ¹; Pollyanna Santos Carneiro da Silva ³; Thaís Guimarães ¹; Augusto Yamaguti ¹; Paula Cristina Nogueira ³; Vera Lúcia Conceição de Gouveia Santos ³; Adriana Macêdo Dell'Aquila ¹

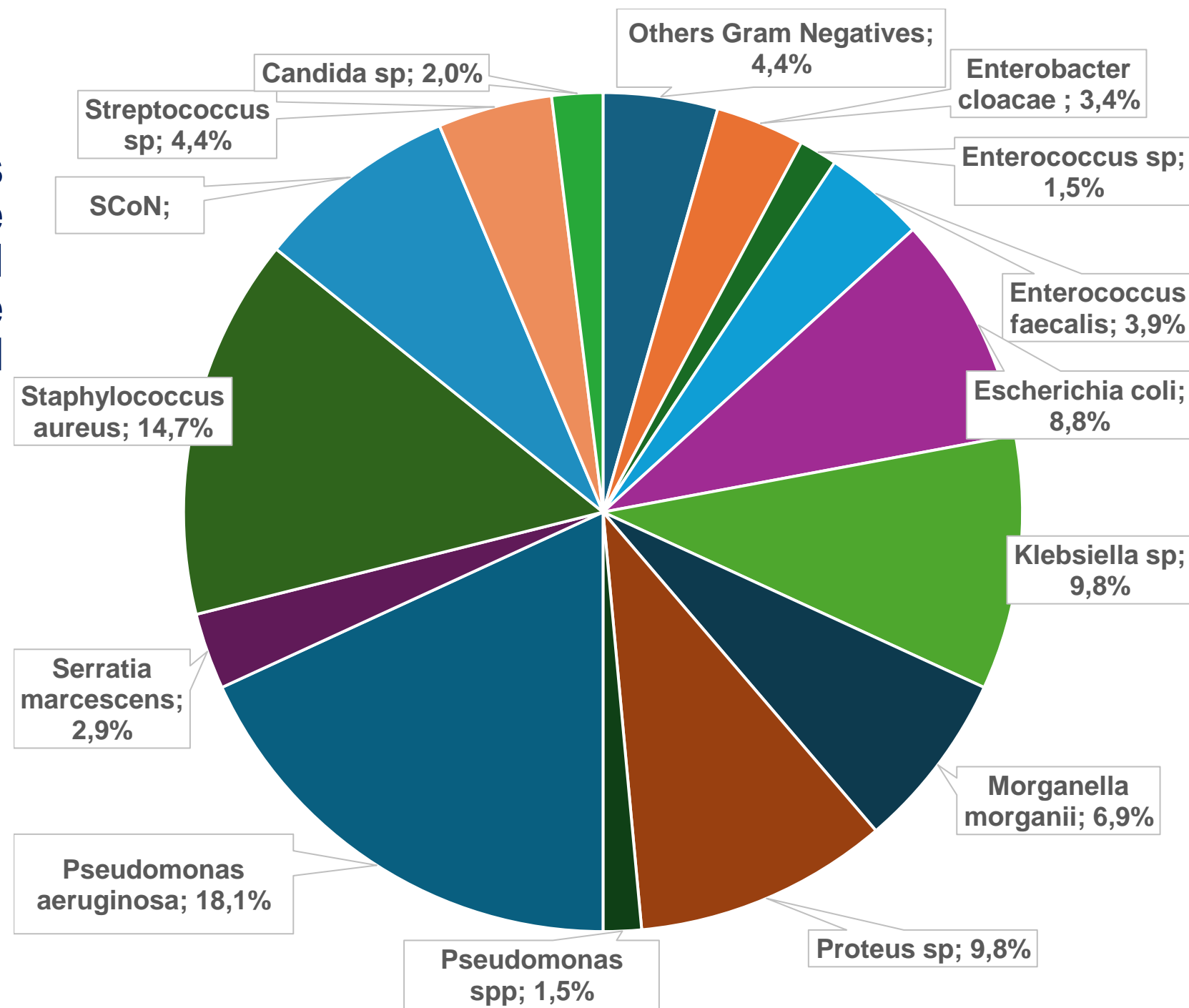
1 Serviço de Moléstias Infecciosas Hospital do Servidor Público Estadual “Francisco Morato de Oliveira”, São Paulo, SP, Brasil. 2 Serviço de Estomaterapia do Hospital do Servidor Público Estadual “Francisco Morato de Oliveira”, São Paulo, SP, Brasil. 3 Departamento de Enfermagem Médico-Cirúrgica da Escola de Enfermagem da Universidade de São Paulo, São Paulo, SP, Brasil

Objective

To analyze the clinical and epidemiological characteristics of complex wounds with delayed healing. Identify the main isolated etiological agents and their antimicrobial susceptibility profiles in wound infections and assess the impact of infectious disease (ID) specialist-led antimicrobial stewardship on healing outcomes.

Methods

This was a retrospective cohort observational study conducted from February 2021 to October 2024, including 71 patients referred to an infectious disease specialist for antimicrobial stewardship due to delayed wound healing, following the implementation of topical therapy by the stomatherapy service. The study was approved by the Research Ethics Committee. Data was collected from individual clinical records and electronic medical records and analyzed using descriptive statistics (means, medians, and proportions). Microbiological profiles and resistance patterns were also described.



Graphic 1. Distribution of 204 agents found in patients with complex wounds with delayed healing between 2021 to 2024.

Results

Involvement of infectious disease specialist enhanced the diagnostic process by enabling pathogen identification through wound aspirates and recognizing comorbid conditions not responsive to antimicrobials or dressings alone. The most frequently isolated pathogens were *Pseudomonas aeruginosa* (n = 37 / 18.1%) and *Staphylococcus aureus* (N = 30 / 14,7%). A total of 66.2% of patients adhered to the proposed treatment, and 63.8% showed a reduction in wound area. However, 36.2% did not improve with topical and systemic antimicrobial therapy alone. Among these, 52.9% were later diagnosed with conditions such as osteomyelitis, 23.5% with deep vein thrombosis, and 17.6% with malignancies. The treatment abandonment rate after identification of a secondary infection was 29.6%.

Conclusion

ID specialist-led antimicrobial stewardship significantly contributed to identifying underlying causes of impaired wound healing, either by establishing the infectious etiology or recognizing associated pathologies. The high treatment abandonment rate underscores the need for improved patient follow-up strategies and protocol optimization to enhance adherence and clinical outcomes.

Reference

1. O'Neill J. Tackling drug-resistant infections globally: final report and recommendations. London: Review on Antimicrobial Resistance, 2014.
2. Ong, C. M., et al. (2021). "Antiseptics and biofilm: The impact of biofilm on the efficacy of antiseptics." *Journal of Antimicrobial Chemotherapy*, 76(8), 2116-2130

State "I have no conflict of interest"