Factors associated with hard-to-heal wounds: a patient profile study

Laura Elisa Cunha Fonseca, Miriã de Oliveira Sant'Ana, Yuri Quintanilha Bernardes, João Victor Fonseca de Carvalho, Thiago César Nascimento, <u>Kelli Borges dos Santos</u>
Universidade Federal de Juiz de Fora



INTRODUCTION

Wounds are defined as the loss of subcutaneous tissue continuity, compromising skin integrity (Eberhardt et al., 2015; Smaniotto et al., 2012). Wounds that take more than three months to heal are considered complex, influenced by intrinsic (age, comorbidities) and extrinsic (necrosis, social and economic factors) elements (Fernandes et al., 2012; Vieira & Araújo, 2018).

Complex wounds impact patients' quality of life, limit autonomy, and increase the risk of early death, as well as treatment costs (Fernandes et al., 2012). Hypertension is associated with a higher incidence of non-traumatic lesions due to decreased local blood flow, leading to hypoxia and tissue necrosis (Mola et al., 2024). Understanding the etiologies and comorbidities associated with wounds is essential for defining treatment strategies. This study aims to analyze factors associated with complex wounds through medical record review.

METHOD

Descriptive, quantitative, cross-sectional, observational, and retrospective study based on the analysis of medical records of patients treated in a wound care outpatient clinic from November 2023 to November 2024.

Data collection included all patients with complete records treated between 2021 and 2024 at the UFJF School of Nursing outpatient wound care clinic in primary and secondary care settings. Incomplete records or those lacking sufficient information were excluded. Approved by the UFJF Research Ethics Committee (Protocol No. 4.605.71).

Sociodemographic, clinical, and wound-related data were collected, including cause/etiology, type of dressing used, current follow-up status, and treatment duration (discharged, under care, or lost to follow-up).

RESULTADOS

A total of 67 patients were treated at the UFJF Nursing School wound clinic from 2021 to 2024. However, only 62 medical records with complete data were included. Table 1 shows the sociodemographic profile.

Regarding comorbidities, 7 patients (11.3%) had none. A total of 36 patients (58%) had at least two comorbidities. The most frequent was arterial hypertension (41 patients; 66.1%), followed by diabetes mellitus (38; 61.2%). Nineteen patients (30.6%) had three or more comorbidities.

Table 1: Socio-demographic data of outpatients

Característica		N	%	Education	Illiterate	02	3,2
Sex	Female	32	51,6	Level	Up to elementary school	20	32,3
	Male	30	48,4		Up to high school	19	30,6
Race	Black	17	27,4		Higher education	04	6,5
	Brown	11	17,7		Not recorded	17	27,4
	White	29	46,8	Occupation	Retired	30	
	Not recorded	06	8,1		Not retired but receives benefits	07	11,3
Marital Status	Married	28	45,2		Estudante Student	01	1,6
	Single	10	16,1		Economicamente ativo	15	24,2
	Divorced	03	4,8		Economically active	13	21,2
	Widowed	13	21		Sem Without paid occupation	03	4,8
	Not recorded	08	12,9		Not recorded	06	9,7

Source: Prepared by the authors (2024).

The average age was 60, with the youngest being 22 and the oldest 91.

Table 2 presents the wound etiologies. Among wounds of other causes: skin tear (2; 3.2%), pyoderma gangrenosum (2; 3.2%), leprosy-related ulcer (1; 1.6%), pressure injury (2; 3.2%), and sickle cell ulcer (1; 1.6%).

Table 2: Etiology of injuries

Etiology	N	%
venous ulcer	28	45,2
non-surgical traumatic ulcer	08	12,9
surgical dehiscence	08	12,9
other causes	08	12,9
diabetes-related ulcers	06	7,3
mixed ulcer (venous and arterial)	02	3,2
unregistered	02	3,2

Source: Prepared by the authors (2024).

As for dressings, the most used was foam with Unna boot (25; 37.3%), followed by calcium alginate (20; 29.8%). Currently, 30 patients (48.4%) were discharged due to

Currently, 30 patients (48.4%) were discharged due to improvement; 11 (17.7%) remain in follow-up. The others were referred to specialists, discontinued treatment, or died from other causes.

FINAL CONSIDERATIONS

Knowledge of pre-existing diseases and wound etiologies contributes to defining appropriate therapeutic strategies and patient care plans. Furthermore, comorbidities guide the establishment of referral and care pathways.

The authors affirm that there are no conflicts of interest associated with this article.