



HEELS SKIN OILINESS: SYMMETRY BETWEEN BODY SIDES



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Introduction:

- ★ Pressure injury development in surgical patients is multifactorial and complex, with incidence ranging from 1.3% e 54.8%⁽¹⁾.
- ★ The skin oiliness, it stands out that epidermal lipid deficiencies mainly occur in ageing skin and have been shown to impact the barrier function of the stratum corneum⁽²⁾.

Objective:

To compare the heels skin oiliness of patients in the operating room between the body sides (right and left sides).

Methods:

- ★ **Secondary analysis** from an intra-patient randomized clinical trial (RCT) conducted in a university hospital in southern **Brazil**, from March 2019 to February 2020, with patients undergoing elective surgery, cardiac and gastrointestinal specialty.
- ★ The variable oiliness was collected at the beginning of surgery - **baseline**, measured in the center of the heel, using a bioelectrical impedance skin analyzer, measured in percentage (%).
- ★ The variables was tested using the **Shapiro-Wilk test**, **Wilcoxon test** and the **Spearman test**.
- ★ Brazilian Registry of Clinical Trials under identifier **RBR-5GKNG5**.

Results



- ★ Data were collected from 135 patients (135 heels on the right side and 135 heels on the left side)
- ★ 59.3% had arterial hypertension,
- ★ 34.8% had diabetes mellitus, and most had an
- ★ 75.6% had an American Society of Anesthesiologists (ASA) score III
- ★ There is no statistically significant difference (p-value=0.186) between the skin oiliness on the left heel (median=23.3%) and right heel (median=21.7%)
- ★ The correlation between the body sides being insignificant (r=0.186; p-value=0.034)

Conclusion:

The results of this study indicate that there is symmetry between the heels skin oiliness between the body sides (left and right side), which can be used as an objective clinical parameter by the nursing team in assessing the risk of developing pressure injuries in patients in the operating room.

Reference:

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2. Borzdynski CJ, McGuiness W, Miller C. Comparing visual and objective skin assessment with pressure injury risk. *Int Wound J*. 2016 Aug;13(4):512-8. doi: 10.1111/iwj.12468