Title: The Relationship between Degree of Malnutrition and the Staging of Sacral Decubitus Ulcers

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Background: Decubitus ulcers, otherwise known as pressure ulcers or bedsores, are injuries to the skin and underlying tissue usually over bony prominences as a result of prolonged pressure to the affected area. One of the most common sites of decubitus ulcer formation is over the sacral area. Malnutrition has been linked as a predisposing risk factor for the development of decubitus ulcers. However, the relationship between the degree of malnutrition and the stage of sacral decubitus ulcers has not been well established.

Objective: The objective of this study is to determine the extent to which the stage of a patient’s sacral decubitus ulcer and a patient’s nutritional status are related.

Methods: This study was designed as a retrospective cross-sectional study using data previously gathered for patient care. The patient data used in this study was selected using the following criteria: 1) The patient must have been admitted to Larkin Community Hospital between January 1, 2011 and December 31, 2011 with a sacral decubitus ulcer at the time of admission as documented by Larkin Community Hospital’s Wound Care Team. 2) The patient must have had a serum Prealbumin Level drawn within 24 hours of admission to check their nutritional status. A total of seventy-six patients met these criteria. The research data was gathered using Larkin Community Hospital’s electronic medical record system.

Results: Using the data gathered, a correlation coefficient of -0.65 was calculated indicating a strong inverse relationship between a patient’s nutritional status and the stage of their sacral decubitus ulcer. Patients with lower Prealbumin Levels were more likely to have higher stages of Sacral Decubitus Ulcers.

Conclusion: The results of this study suggest that nutrition plays a crucial role in the development and progression of decubitus ulcers. Patients who were severely malnourished were much more likely to have Stage 4 Sacral Decubitus Ulcers while patients that were only mildly malnourished were much more likely to have Stage 1 Sacral Decubitus Ulcers. This study reaffirms the need to feed patients who have decubitus ulcers, or are at risk of developing decubitus ulcers, a diet rich in protein so as to help treat and/or prevent the formation of decubitus ulcers.