INCIDENCE AND RISK FACTORS OF PRESSURE ULCERS IN PATIENTS WITH SPINAL CORD INJURY IN SUBACUTE REHABILITATION

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Background and Aims

Pressure ulcers are among the most common complications within the first year following a spinal cord injury (SCI), significantly impeding the rehabilitation process. The aim of this study was to determine the incidence of pressure ulcers among SCI patients during first two rehabilitation courses, to analyze the associated risk factors.

Methods

A retrospective analysis of 135 SCI patients admitted to the National Rehabilitation Centre "Vaivari" 2018 - 2021 was conducted. Data were collected from medical records during first two specialized subacute inpatient rehabilitation courses, included ASIA, SCIM, Braden assessments.

Results

A total of 135 medical records of patients with SCI were analyzed, males 68.15%. Based on the Braden Scale, high or very high risk of developing pressure ulcers was identified in 41.48% of patients during the first rehabilitation course, in 13.33% during the second. Pressure ulcers were observed in 15.56% of cases during the first rehabilitation course, with 38.10% of these classified as deep (Stage III-IV). During the second course, pressure ulcers occurred in 11.11% of cases, with 33.33% considered deep. Pressure ulcers were present in 28% of patients in high risk and in 9.68% in very high risk during the first rehabilitation course. In the second, ulcers were present in 57.14% of high-risk and 18.18% of very high-risk patients. Pressure ulcers were more frequent in male patients (P = 0.02). However, patients with complete spinal cord injury had a higher incidence of pressure ulcers (P = 3.83×10^{-5}). Reduced mobility and limited self-care ability, were associated with an increased risk of developing pressure ulcers (P = 8.18×10^{-4} and P = 5.14×10^{-6}).

Conclusion

The risk of pressure ulcers is highest during the early subacute phase following spinal cord injury. Key risk factors include the completeness of the lesion, as well as impaired mobility and self-care abilities.

Keywords: spinal cord injury, pressure ulcers