



WOUND HEALING

## PREVALENCE OF SKIN TEARS IN THE EXTREMITIES IN INPATIENTS AT A HOSPITAL IN DENMARK

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Skin tear is a type of wound that is often misjudged and mistreated. Skin tears are wounds caused by shear, friction and/or blunt forces resulting in separation of skin layers. Researchers suggest that skin tears are more prevalent than pressure ulcers and burns. The literature on prevalence of skin tears shows mostly data from Australia, Canada, Asia and the United States.

**Objectives:** The aims of the study were to determine the prevalence of skin tears in the extremities and to explore factors associated with development of skin tears in inpatients at a Danish hospital.

**Methods:** The study was designed as a point prevalence survey and included 202 patients in the age range 19-99. The patients were assessed for presence of skin tears, numbers, locations and previous skin tears. The survey team consisted of four specialist nurses. Data were collected over a period of 24 hours.

**Results:** Of the 202 patients, skin tears were detected in 23 patients, yielding a prevalence of 11.4%. In total 40 skin tears were observed. Prevalence varied greatly among specialties ranging from 0-31.6%. Multiple logistic regression analysis showed that previous skin tears (odds ratio (OR) 9.3, 95% confidence interval (CI) 2.6-33.4,  $p < 0.001$ ), ecchymosis (OR 5.6, CI 1.4-23.2) and risk of falling (OR 3.8, CI 1.2-12.0) were significantly associated with development of skin tears. In the analysis of the influencing factors, we found several significant parameters as high age, use of prednisone spray more than one-year, impaired memory, use of walker, bed guard rails, nutritional risk and low Braden score.

**Conclusion:** The prevalence of skin tears in this study (11.4%) matches other international observations. The following risk factors were recognised: previous skin tear, ecchymosis and risk of falling. These factors could be used to identify patients requiring prevention of skin tears.

