

MITIGATING THE DAMAGING EFFECTS OF TISSUE DISTORTIONS BY USING A LOW-FRICTION HEEL PROTECTOR

Alison Schifield

North Lincolnshire and Goole NHS Foundation Trust, UK

Heel pressure ulcers are reported to be the most prevalent of hospital acquired PU's despite the variety of products available, wedges, boots, gel supports and mattresses. A recent study by Guest et al (2018) calculated that NHS costs of treating a PU over 12 months ranged from £1400 to £8500 depending on the severity. Personal costs to the patient are in the form of pain, discomfort, limitations in mobility, decreased quality of life. Strategies that focus on prevention benefit the patient and the NHS, such strategies must consider effectiveness, cost, ease of application, comfort and choice. The heel is particularly vulnerable due to the weight of the leg and foot, the shape of the calcaneus, a thin layer of skin and often poor blood supply in the higher risk patient. Biomechanical research has found that tissue deformation very quickly leading to cell death faster than hypoxia. The squashing and stretching caused by shearing and friction can cause such damage and static friction even if using other devices, puts stresses under the skin surface. An evaluation was performed in North Lincolnshire and Goole NHS Trust by the Tissue Viability Lead nurse due to a high incidence of reporting in heel PU. It took place across three different settings, acute stroke ward, intermediate care and residential home demonstrating the cycle of care and that the risk remains despite the setting. Low friction fabric bootees were provided to the patients included used in both bed and when sat in a chair without mobilising. Results of the pressure mapping showed a reduction in peak heel pressure after application of the low friction bootees. Further reduction when used in combination with an offloading wedge device.

a.schofield2@nhs.net