

Examination of patients' experience of pain during lateral transfers

Comparison of glide boards and air-assisted transfer mattress (HoverMatt)

Introduction and purpose

Many lateral transfers are done every day at Karlskoga Hospital's emergency room. Patients often find these transfers painful, and they place a heavy strain on staff. Historically, the hospital has used glide boards for these transfers, which have been perceived as painful, especially for patients with suspected hip fracture. This patient group performs 5–10 lateral transfers during their time in hospital.

In an effort to reduce pain for patients with suspected hip fracture, Karlskoga Hospital has tested and evaluated the HoverMatt air-assisted transfer mattress. The purpose of the survey was to evaluate the difference in pain between transfers using the HoverMatt aid and traditional glide boards.

Method

The survey was conducted using a visual analogue scale (VAS), where patients rated their pain on a 10-point scale from "No pain" to "Severe pain".

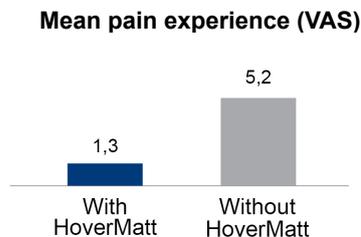


The patient base consisted of two groups of 64 patients with suspected hip fracture, who were transferred from the ambulance stretcher to the hospital bed. To enable comparison between the two types of aids, 30 patients were transferred using a glide board, and 34 patients were transferred using HoverMatt.

Results

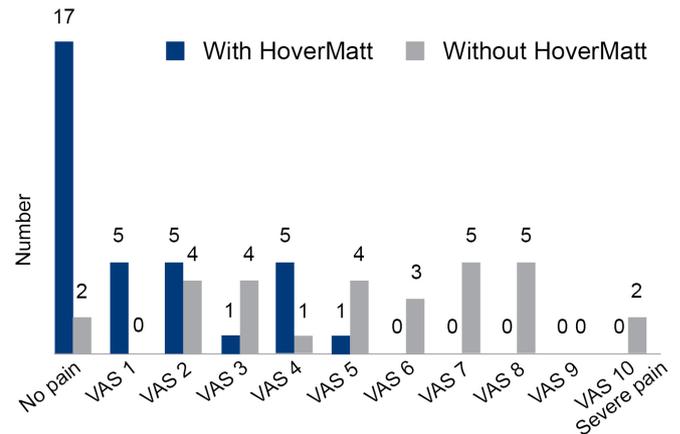
The survey clearly showed that patients who were transferred using the HoverMatt experienced less pain compared to those transferred using traditional glide boards.

The average VAS value for patients transferred using the HoverMatt was 1.3, compared to 5.2 for glide boards.



Of the 34 patients transferred using the HoverMatt, 17 patients (50%) responded "0 – no pain" on the VAS-scale. The patient transferred using the HoverMatt who experienced the most pain responded with a 5.

Pain experience lateral transfers per aid (VAS)



Comparatively, out of the 30 patients who were transferred using a glide board, only 2 patients responded with "0 – no pain", while 15 patients responded between 6-10. Thus, half (50%) of the patients transferred using a glide board experienced a higher level of pain than the patient who reported the highest pain level when transferred using the HoverMatt pain experience.

Discussion

The purpose of the survey was to compare the pain experience of lateral transfers between glide boards and the air-assisted transfer mattress, HoverMatt. The result shows that the pain experience was significantly lower when using the HoverMatt. This can be observed through a lower mean VAS pain score (1.3 vs 5.2).

50% of patients transferred using the HoverMatt experienced 'No pain'. The patient transferred using the HoverMatt with the highest pain experience (VAS: 5) still experienced less pain than 50% of the patients transferred using a glide board.

With a relatively large patient base (64 patients distributed across two groups), the results are considered to reliably demonstrate that the pain experienced by patients during lateral transfers is significantly lower when using the HoverMatt compared to glide boards.

About Karlskoga Hospital

For many years, Karlskoga Hospital has actively worked to promote an ergonomic working environment for its staff, and has often been regarded as a role model and reference hospital in the field of transfer technology. The institution has been awarded a number of awards and accolades for its work, including the "Förflytningspriset (Transfer Award) 2004" from the Nordic Network Forum for Transfer. Karlskoga has also been highlighted as a good example in the Swedish Work Environment Authority's campaign "A raise in healthcare".