Installing electrically operated beds

A pressure ulcer can be defined as a skin wound which occurs following disruption to the blood supply due to pressure, shearing and/or friction (Dealey, 1997). The grading of pressure ulcers ranges from grade 1 (skin intact, but redness present, blistering, non-blanching hyperaemia) to grade 4 (full thickness skin loss with extensive destruction, necrosis and damage of muscle, bone and supporting structures). The higher an ulcer’s grade, the more severe are the implications for treatment, financial costs and impact on patient recovery.

Many factors may contribute to the development of pressure ulcers including general health, nutritional and fluid intake, and friction and shear. The moving and handling of patients in bed is thought to increase the risk of pressure damage due to shearing and friction (Gebhardt, 1995), while the manual moving of patients, which involves stooping, twisting, reaching and bending, increases the risk of staff injury (RCN, 1996).

The majority of hospital beds are standard hydraulic, foot-pump operated devices with a flat base and pull-out backrest. Patients using these tend to slide down the bed (Mitchell, 1998), and often have difficulty adjusting their position. In contrast, electrically operated profiling beds enable patients to move themselves independently, reducing the risk of staff injury and pressure ulcer development (Mitchell, 1998).

Electrically powered beds with variable height controls are described as ‘beds of choice’ for patients confined to bed (King’s Fund, 1998). However, there are limited clinical trials on their effectiveness (Keogh and Dealey, 2001). Clinical evidence suggests that they can have a positive impact on the health of both patients and staff.

The project

The aims of introducing electric profiling beds in Gateshead Health NHS Trust were to:

- Reduce the prevalence of pressure damage for at-risk patients;
- Improve patients’ comfort and independence;
- Minimise the risks of back injury among staff, by reducing manual handling.

The renewal of a therapy bed contract offered an ideal opportunity to review patient comfort and minimise the risk of back injury among staff involved in the care and handling of patients in bed. The project was to ensure that the new therapy bed contract would improve patient care while remaining within budget.

To effect positive change it was essential that the trust, the prevalence of grade 3 pressure ulcers and above reduced from 6.6 per cent to 3.8 per cent following the introduction of the bed system.

A cross-sectional sample of therapy bed users and staff were surveyed to evaluate subjective benefits of the beds six months after their introduction. Bed users highlighted that the new beds gave them more independence and personal control, compared with the traditional hospital beds. Staff noted that the reduced moving and handling improved their working lives.

The project won the Nursing Times Essence of Care in Wound Care award 2002.

KEY WORDS

Bed management
Pressure ulcers
Back injury

REFERENCES