

A Case Study Examining the Beneficial Effect of the Dolphin Therapy Surface for a Community Patient

Introduction

The ambition to move care out of hospitals has been on the policy agenda for years. The aim to stem rising levels of hospital activity by providing care in the community has seen ever increasing levels of complex patients cared for in the community setting.

There is a general consensus that care closer to home is better for patients. Hospital at home schemes – where patients are cared for in their own home rather than in a hospital setting – have consistently resulted in improved levels of patient satisfaction compared to ordinary care. Care is structured around the patient and is provided by the multi-disciplinary team according to their needs^{1, 2}.

The majority of a patient's final year in life is spent at home and most people would choose to die at home. Increasingly people still die in hospital. These excessive numbers are due to; unresolved symptom control, breakdown in provision of home care provisions such as lack of nursing/ night sitters; and lack of support for carers³.

Many patients at end of life in the community are unable to obtain a comprehensive care package or the correct resources for their needs. Despite best efforts to deliver increased nursing care to this patient group, it is frequently impossible due to lack of nurses available. Patients nursed at home who have pressure ulcers are, for reasons stated above, are at higher risk of death from sepsis.

There is significant human suffering involved for people living with pressure ulcers. They have a huge impact on patients' quality of life, with pain a feature of approximately 43% of cases⁴. Pressure ulcers in older patients are associated with a fivefold increase in mortality⁵.

If patients in the community need to be admitted to hospital there are significant incremental treatment costs. NICE clinical guideline 179 estimates the increased length of stay to be an average of 5-8 days per pressure ulcer. This results in overall incremental treatment cost for each pressure ulcer of £7,600 or £22,000 in ITU⁶.

Case study

This case study is of a 94-year-old female patient, suffering from dementia. She had been bed-bound, surviving only on fluids and fortified supplement drinks for the past two years. The patient's son lived far away and she was therefore completely reliant on care.

In December 2016, the patient had a course of antibiotics and had diarrhoea as a result. This led to tissue breakdown, with the subsequent development of pressure ulcers. In Feb 2017 the community TVN became involved. By this time the patient had developed an ungradable pressure ulcer on her sacrum which was later debrided and classified as a category IV pressure ulcer. She also had multiple category I pressure ulcers on both trochanters and black necrosis on both heels.

In addition to her pressure ulcers above, this lady had dry and oedematous skin further placing her at increased risk of further pressure ulcers. Due to lack of social care package there were long gaps between carer visits and hence personal care and repositioning. She was being nursed on a powered hybrid. Her wounds were not healing.

2 Cygnus Court, Beverley Road, Pegasus Business Park, Castle Donington, Derby, DE74 2SA
Registration No 05709304 VAT No 885208793

Tel: 0845 371 1717 Fax: 0845 618 3030 Email: sales@medstrom.co.uk

Introduction of Dolphin Therapy

The TVN had previously used the Dolphin Therapy surface with highly complex patients when she was working in the acute sector and had experienced very positive outcomes both in terms of pressure ulcer prevention, healing, comfort and positive patient experience.

She therefore made the decision to contact Medstrom Healthcare to request Dolphin Therapy for this patient.

The patient was placed on Dolphin on 20th Feb 2017 and has been on the surface since.

Results

By May 2017 all the patient's category I pressure ulcers had healed. No further pressure ulcers had developed. Both heels had fully healed. The sacral pressure ulcer has shown consistent improvement but had not yet fully healed.

In addition to utilising Dolphin Therapy, carer training and awareness was increased but the lack of a care package and nursing input remains unchanged. Nutritional intake and status of the patient remains unchanged.

Due to the patient's dementia, it is difficult to judge whether she is more comfortable on Dolphin but non-verbal cues indicate that she is.

Discussion

The process of ordering Dolphin is easy and great support is provided by the Medstrom clinical advisors. Thorough training was provided by the Medstrom clinical nursing team for the community nursing team, supplemented by the Medstrom engineers at the patient's home for carers. The service provided by Medstrom is outstanding, with the surface delivered and installed usually within four hours. The Medstrom team offer 24 hour clinical and technical support throughout therapy.

Conclusion

Selecting Dolphin Therapy for complex patients who are bed bound and have multiple comorbidities delivers not only obvious health benefits for the patient, but also avoids the high incremental treatment costs associated with pressure ulcers; 24-hour care packages, TVN time, dressings etc.

The use of Dolphin Therapy for this patient group along with the support of the Medstrom Clinical and Technical team provides answers for the concerns that are cited for patients not being able to remain at home during end of life care:

- Unresolved symptom control
- Breakdown in provision of home care provisions – use of specialist surface
- Lack of support for carers

Sacrum



10th February 2017, 2.5cm
Ungradable sacral ulcer
Sacral pressure ulcer has improved swiftly during this period.



27th February 2017, 3.8cm
Category IV sacral pressure ulcer



20th March 2017
Category IV sacral

Left Greater Trochanter



10th February 2017, 4.7cm
Category I pressure ulcer, non-blanching erythema

Category I pressure ulcer has healed, no new skin mark despite patient lying on this side. Patient's turning regime at that time was to turn to right or left lateral side lying position (30° tilt) on Dolphin mattress three times a day.



20th March 2017
Healed category I pressure ulcer

Right Greater Trochanter



10th February 2017, 4cm
Category I non-blanching erythema
Category I pressure ulcer is moving towards healing in such a short time even with patient being positioned on this side.



27th February 2017
Healing category I pressure ulcer to right trochanter

Right Hip



20th March 2017
Healed category I pressure ulcer

References

1. Moving Health Care Close to Home (2015) Monitor.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/459400/moving_healthcare_closer_to_home_summary.pdf
2. Castle-Clarke S (2017) 'Hitting home: the evidence on care in the community'. Nuffield Trust comment, 1 March 2017.
<https://www.nuffieldtrust.org.uk/news-item/hitting-home-the-evidence-on-care-in-the-community>
3. Thomas. K. (2003) The Gold Standards Framework in community palliative care. *Eur J Palliative Care.* 10:113-115
4. Briggs, M. Collinson, M. Wilson, L. Rivers, C. McGinnis, E. Dealey, C. (2013). The prevalence of pain at pressure areas and pressure ulcers in hospitalised patients. *BMC Nursing.* 12(1):19
5. Grey, J.E; Harding, K.G; Enoch,A. ABC of Wound Healing: Pressure Ulcers. *BMJ* (2006); 332:472-474.
6. NICE (April 2014). Costing statement: Pressure ulcers Implementing the NICE guideline on pressure ulcers (CG179). Available at: <https://www.nice.org.uk/guidance/cg179/resources/costing-statement-248688109> (accessed Jan 2017)