

Peaceful and Pain-free: The Dolphin Therapy Support Surface Reduced Suffering for a Patient Receiving End-of-Life Care

- ↑ Significant improvement in unstageable pressure ulcers
- ↓ Pain reduced
- ↑ Comfort and sleep quality improved

Introduction

Albert* (age 78) was admitted to hospital following a 'long lie' at home. He had been lying on the floor for six days before being discovered and taken to hospital. He was diagnosed with urosepsis on admission.

His past medical history included:

- CVA
- Hypertension
- Atrial fibrillation

On admission, Albert had DTIs to his right knee and shoulder and discolouration to his sacrum. All had developed as a result of the length of time he had been lying on the floor.

**Albert is not the patient's real name*



Clinical Challenges

Albert was clinically extremely unwell, and his skin was at very high risk of further breakdown. He was also in pain and generally very uncomfortable.

A support surface was required to help treat existing skin damage and prevent any further breakdown. In addition, to help reduce Albert's suffering, it needed to help with holistic aspects of care such as improving comfort and sleep, and reducing pain.

Patient Objectives

Albert underwent active treatment at first, but he was so unwell his response was poor, and it became apparent that he was unlikely to recover. As he continued to deteriorate, he received palliative care.

The objectives for Albert were to:

- Reduce pain
- Improve comfort
- Prevent further skin damage and deterioration
- Treat existing skin damage
- Improve quality and quantity of sleep

Introduction of the Dolphin Therapy Fluid Immersion Simulation Support Surface

Dolphin Therapy is a unique reactive support surface that simulates a fluid environment. Research has demonstrated that it maintains tissue symmetry,¹ minimises vascular occlusion² and prevents tissue ischaemia, even when the patient is nursed directly on a wound.³ Data collected from over 3,000 patients has demonstrated that it is extremely effective at both treatment and prevention of skin damage.⁴

Albert was briefly nursed on a standard dynamic mattress when he was first admitted to hospital. However, the clinical team realised quickly that his skin was at extremely high risk of further deterioration, and he needed a higher acuity support surface that could help to prevent this and improve his holistic care. He was transferred from the standard mattress to Dolphin Therapy within an hour of admission, and a two-hourly repositioning regime was commenced.

Despite this, within 24 hours, all three areas of skin damage had deteriorated to unstageable pressure ulcers. No new areas of damage were apparent.

Albert was nursed on Dolphin Therapy for a total of 12 days. Once his pain was under control, achieved by a combination of analgesia and the support surface, he became much more comfortable and was able to rest and sleep better. The three pressure ulcers had all significantly improved, and no new skin damage occurred.

Albert passed away whilst still on Dolphin Therapy, comfortable and pain-free.



Skin improved



Comfortable



Pain-free

Summary

It was hoped that Dolphin Therapy would help to prevent any further deterioration of Albert's existing skin damage but this didn't happen initially. Dolphin Therapy has demonstrated excellent outcomes for treatment of pressure ulcers; in a total of 2,190 patients placed on Dolphin Therapy for treatment purposes, 58% of wounds healed or improved, 39% remained static and 3% deteriorated.⁴ However, it is impossible to prevent skin damage or further breakdown in every patient, and the complexity of patients like Albert means that it sometimes occurs despite multi-faceted interventions.

After the initial deterioration of Albert's skin, the pressure ulcers started to heal and significantly improved, despite him approaching end-of-life. This, together with the other benefits of improved comfort, sleep, and pain control, helped to ensure that the end of Albert's life, and the days approaching it, were dignified and peaceful.

References

1. CT scans from St Joseph's Hospital, Tampa, Florida.
2. Worsley PR et al (2015). The effects of a fluid immersion mattresses; an evaluation of fluid immersion therapy for the prevention of pressure ulcers. 18th Annual Meeting of the European Pressure Ulcer Advisory Panel, 17th September 2015. Faculty of Health Sciences, University of Southampton.
3. Mayes KL et al (2012). Cost effective care without clinical compromise: Incorporating the Dolphin Fluid Immersion Simulation Mattress System into the postoperative care of patients undergoing myocutaneous flaps. Poster presented at Wild on Wounds National Conference, September 12 - 15, 2012, Las Vegas, NV.
4. Medstrom (2023). Data on file.

To discover more about Dolphin Therapy and how Medstrom can support you, contact our Clinical Advisors 24/7/365 on:

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