

Tilting Your Way to Better Patient Outcomes – Where, When and Why?

Daisy Culaj, Tissue Viability Lead Clinical Nurse Specialist



The Hillingdon Hospitals
NHS Foundation Trust

The Dolphin Therapy surface and Eleganza 5 bed used together can help achieve improved patient comfort, recovery, and outcomes. Combining unique fluid immersion simulation with a tilting mattress platform, they have proved very effective both inside and outside of intensive care in helping patients with complex needs.

Where?

In **The Hillingdon Hospital**, we've expanded the use of this combination therapy, and to date have used it in the following areas:

- Intensive care
- Endocrinology
- General Medicine
- ARCU (Acute Respiratory Care Unit)
- Care of the Elderly

This poster describes a case study of one patient who gained considerable benefits from using both products together.

INTRODUCING GRAHAM

Graham (age 70) was admitted to a general medical ward for treatment of hypoglycaemia and osteomyelitis. On admission, he had extensive skin damage:

- Multiple Category 2 pressure ulcers and areas of moisture-associated skin damage to his sacrum, buttocks, gluteal folds and perineum.
- Suspected deep tissue injury to his right buttock.
- Full thickness skin loss to his right gluteal fold.
- Diabetic foot ulcer to his left heel.

All of these were community acquired, with Graham stating that they started when he was temporarily in a care home. Before admission, he was living at home with his wife, receiving a QDS care package, and using an electric profiling bed with a high specification foam mattress.



His past medical history included:

- Right leg below knee amputation approximately one year ago
- Type 2 diabetes mellitus
- Smoker
- Stage 4 chronic kidney disease
- History of falls

In hospital he was on 19 different medications including insulin. His PURPOSE-T pressure ulcer risk level was RED, and the Tissue Viability Service was asked to assess him due to slow progress of wound healing.

"It takes away the pressure so they [wounds] heal a lot quicker... and now all the wounds are healed... and there has been no sign of any breakdown."

- Wound healing outcomes

CLINICAL CHALLENGES

- Very limited mobility
- Occasional incontinence
- Skin integrity
- Pain
- Difficulty and pain on repositioning
- Poor sleep quality
- Uncomfortable in bed – 'lopsided' feeling due to amputation.

PATIENT OBJECTIVES

- Improve/heal skin damage areas
- Prevent further skin deterioration
- Improve pain management
- Facilitate repositioning
- Improve comfort and sleep quality

Initial TVN prescribed treatments included a step up from a foam to alternating pressure mattress, air cushion, barrier products, two-hourly repositioning and slide sheets.

"It [sleep] has improved, I would say, 100 percent ... and I often sleep the whole night without fidgeting."

- Sleep outcomes

"I can quite happily say that this is the most comfortable bed I've slept in, in my life."

- Comfort outcomes

"Backache, with this bed, is a thing of the past."

- Pain outcomes

When?

New interventions

Following a failed discharge, and continued slow progress in wound healing, with Graham's input and consent we decided to try a new equipment combination:

- Dolphin Therapy** fluid immersion simulation surface (stepped up from a dynamic air mattress)
- Eleganza 5** electric profiling bed with full-length platform lateral tilt (stepped up from a med/surg electric profiling bed)



Why?

Dolphin Therapy is a unique reactive support surface that simulates a fluid environment. Research has demonstrated that it maintains tissue symmetry,¹ minimises vascular occlusion,² and prevents tissue ischaemia even when the patient is nursed directly on a wound.³ It is also evidenced to improve comfort, sleep, and pain management, as well as reduce turning frequency.⁴

As one of very few 'step up' options from a dynamic air mattress,⁵ we hoped that it would both assist with wound healing, and prevent any further breakdown.

In addition to **Dolphin Therapy**, the **Eleganza 5 bed** offers a number of benefits for patients with complex needs, which we thought could help Graham overcome more of his clinical challenges.

Full platform lateral tilt:

- Gives easier off-loading and positional changes
- Allows more 'hands off' care
- Can reduce number of staff needed to reposition the patient
- Reduces manual handling risks

In addition, the full cardiac chair gives excellent upright positioning, helping to reduce complications of immobility in patients spending a lot of time in bed.

PATIENT OUTCOMES

"Repositioning is surprisingly easy ... you can tilt the bed and it helps you move. It's easier for the staff to help me do things."

- Repositioning outcomes

"I've lost the lower part of my leg. It makes you lopsided as a person, but the bed balances you out nicely. It does weight distribution ... so it keeps you straight."

- Benefits for an amputee

Graham learned how to use the bed controls, so he could participate in his own care and reposition himself. The lateral tilt was very helpful in assisting with more comfortable positioning, with less hands on care, benefitting both him and the clinical staff.

For Graham, the **Dolphin Therapy/Eleganza 5 combination was very advantageous**. We felt the benefits were considerably greater using them together than if either one had been used in isolation. Graham's objectives were all met; the benefits and outcomes are described in his own words on this poster.

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