Modern wound care management combined with the 

Dyna-Form®
Low Air Loss

Clinical Application / PU Grading

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Clinical Problems

Low air loss mattresses have cells that support the user on a cushion of air. They work by increasing the surface area in contact with the skin, therefore reducing the pressure at a particular point. Air is gradually lost, but continuously replaced in response to the weight distribution and movement of the user.

The DYNA-FORM Low Air Loss system is designed for patients at very high risk of developing pressure damage.

Case Study: Northumbria Healthcare NHS Foundation Trust has utilised the benefits of Low Air Loss mattresses for many years for our patients at risk of pressure damage. We utilised the new DYNA-FORM Low Air Loss system in May 2013 when the mattress was placed with a patient in their own home. The patient has complex healthcare needs, spends up to 16 hours per day in bed and also has an existing chronic Category 3 pressure ulcer which has been present for several years. The patient has had many pressure redistributing mattresses over the years, including alternating pressure mattresses, but the patient condition improves with low air loss technology.

The patient has commented on the reduced level of noise from the pump of the DYNA-FORM Low Air Loss system. Indeed, the pump is very quiet and this is an improvement on other systems we have utilised previously. We have on occasions had to remove other low air loss systems from patients’ homes at their request due to the level of noise from the pump that disturbs their sleep.

Like other low air loss mattresses the DYNA-FORM Low Air Loss system has an Auto-firm mode which quickly inflates the mattress cells to maximum pressure in order to facilitate nursing care and transfer. This facility will automatically return to the previous mode after 30 minutes of operation. This is very reassuring for both the patient and carers as the risk of the mattress being in Auto-firm for long periods of time is reduced.

The DYNA-FORM Low Air Loss mattress also has a Seat Mode that can be utilised when the patient is sitting up in bed. Once activated, the pressure in each cell is increased by 5mmHg to prevent the patient from bottoming out. This has proved to be especially useful for the patient in this case study as previously they had often felt they were sitting on the base of the bed frame when sitting up in bed.

Conclusion

The patient still has the DYNA-FORM Low Air Loss mattress in-situ and has stated that this mattress has been an improvement on previous mattresses not only due to the reduced noise from the pump but also the different modes available to assist with daily living.