Modern wound care management combined with the

Dyna-Form®
Air Pro-Plus

Clinical Application / PU Grading

I  II  III  IV

By Maria A. Hughes
Tissue Viability Nurse Specialist (working in a freelance capacity)

RGN, Cert P.P, Dip P.P, Dip Derm, Cert Ed, BA (Hons) PCET, V300 Independent Prescriber.
Clinical Overview

A 77 year old female was admitted from home to a local high dependency nursing home with a Grade 4 European Pressure Ulcer Advisory Panel (EPUAP) pressure ulcer to the left heel with tracking infection to the plantar aspect of the foot.

The healing process was sadly compromised by Type 1 Diabetes, Ischemic heart disease and stage 3 renal failure. Dietary intake was rather poor and the patient disliked all forms of dynamic (alternating) air mattresses, regardless of type and was rather reluctant to be repositioned.

Day 1
The wound area consisted of 100% necrotic tissue, combined with a tracking infection. The site was treated with topical antimicrobials, Gelling foam dressing and systemic antibiotics. From an initial medical perspective, it was highly likely that an amputation would be required due to compromised macro and micro vessel disease. It was decided that holistic treatment via means of a professional clinical team, various dressing types and drug treatment, along with application of Dyna-Form Air Pro-Plus mattress system to be appropriate. This combination would be evaluated by the patient as a preliminary course of treatment for the foreseeable future.

Day 89
Fortunately 100% of granulation tissue was achieved and the infection appeared to be resolved. However, blood sugars continued to remain unstable. The patient acknowledged that the treatment and in particular the Dyna-Form Air Pro-Plus mattress was comfortable and “noise free”.

Day 134
By this date, we had achieved 10% epithelisation and 80% granulation tissue. 10% slough had developed as the infection treatment continued, and the patient became concordant with repositioning. She continued to find the mattress in particular and combined treatment comfortable. Previously, the patient had reported ridging to legs on most PAC equipment used in the past. This was not the case with the Dyna-Form Air Pro-Plus mattress.

Day 192
Amazingly, 20% epithelising tissue, 5% slough and 75% granulation tissue was achieved, even though healing was compromised again as a result of a chest infection and unstable blood sugars. Treatment continued without topical antimicrobial use and the patient became reliant on the support surface and holistic accumulative treatment.

Day 209 (trial monitoring ceased) — Sight remaining slightly callous with no infection and most importantly no amputation.

Conclusion
During this case, the relevant implemented wound care products, appropriate and continuous nursing care, along with the latest Dyna-Form Air Pro-Plus mattress replacement system were reported and concluded to be extremely successful over a thoroughly monitored 209 day period (approximately 7 months). The patient found the mattress extremely comfortable and the pump to be extremely quiet. This had proven not to be the case with many other mattress systems from various “high profile” suppliers in previous courses of treatment. The nursing staff also found the mattress easy to use, with an easy selection (auto) weight setting. This function in particular enabled a reduction of risk for potentially incorrect mattress settings that could have contributed to further pressure damage. Staff also found the self diagnostic system very useful in the event of a power failure. The power unit was very compact and fitted rather well on an electric profiling bed.

In summary, the Dyna-Form Air Pro-Plus mattress replacement system was easy to clean, use, was lightweight and importantly “ultra quiet”. This system proved to be popular with the entire care team, along with the patient.