Skin breakdown and neck ulceration are a recognised complication in tracheostomy patients. We discuss the use of V.A.C. therapy as a novel intervention for management of a refractory pressure ulcer of the neck under tracheostomy tapes for a child with complex medical needs.

History

We present the case of a 6 year old girl with Guillain Barre Syndrome and Severe Combined Immunodeficiency who had a tracheostomy and challenging long term ventilation.

She presented with a refractory pressure ulcer on the neck measuring 4cm x 4cm x 0.25cm with granulation visible at the base of the wound.

No improvement was seen following:
• use of a range of dressings
• tissue viability input
• intubation was attempted to rest the neck but abandoned due to severe trismus and challenging intubation
• plastic surgery team advised grafting and flaps were not feasible due to her complex needs

VAC Therapy

V.A.C. therapy (TNP-topical negative pressure)
• Is an advanced wound healing therapy
• It delivers topical negative pressure
• It promotes wound healing by reducing oedema, promoting granulation tissue formation and perfusion
• It removes exudate and infectious materials
• It allows inward epithelial migration

This novel use of KCI VAC therapy in situ allowed safe management of the airway with standard tracheostomy tapes in place but avoiding further pressure damage.

It was also an effective barrier to further bacterial contamination which was beneficial in view of her immunodeficiency.

Outcomes

Over several months, the VAC dressing was changed twice weekly and resulted in complete resolution of the ulcer.

Dressing application was challenging in view of the patients complex needs. A bridging technique was used to prevent further pressure damage.

Whilst it was the smallest VAC dressing used in our hospital, it had the most clinically significant outcome.

Conclusion

In patients with neck ulceration resistant to standard dressing regimes, V.A.C. therapy is a novel and non invasive alternative to consider to accelerate wound healing and avoid surgical management.