

Nanoparticulate aggregate wound dressing in the management of soft tissue wounds.

Purpose: This investigation presents clinical outcomes post utilization of nanoparticulate aggregate hydrogel wound dressing following radical debridement in a 43-year-old native American female who presents with a case of necrotizing fasciitis and a history of diabetes mellitus.

Methods: Following serial debridement, the patient was left with a large dorsal foot wound. The patient was transitioned through a multitude of advanced wound healing modalities. NPWT was initially utilized in the post-operative setting to control drainage and to promote granulation tissue, however the patient was transitioned to a nanoflex hydrogel wound dressing on post-op day 4.

Results: The patient reported a decrease in pain associated with dressing changes transitioning between the NPWT and the use of nanoparticulate hydrogel wound dressing. We envisage that this reduction in pain is due to a light cooling effect of the hydrogel dressing and subsequent reduction in inflammation as well as the total contact nature of the dressing.

Conclusion: Nanoparticulate aggregate hydrogel wound dressings are a recently developed advanced wound healing modality that can be potentially useful in the management of complex soft tissue wounds.