Evaluation of a high capacity super absorbent dressing with a silicone release layer versus a traditional hydrofiber and a traditional alginate in ease of release and wound base protection

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Problem Statement
Venous insufficient ulcers exudate large amounts of fluid. As the edema in the legs resolve, the wound bases may bleed and dressings can stick to the base making them difficult to remove and causing excellent granulation tissue to be disturbed. This study takes a look at the use of a traditional hydrofiber and an alginate versus a high capacity super absorbent dressing with a silicone contact layer and the ability to protect a wound base during removal.

Study overview and past treatment and execution
Thirty residents/patients were followed. All had resolving edema and venous insufficient wounds. All had moderate drainage upon the initiation of the study. Ten used the traditional hydrofiber, ten used the alginate and ten used the high capacity super absorbent with silicone for their primary dressing over their ulcers. All were cleansed with normal saline and placed in a three layer sustained compression therapy device after dressing application. The wounds were examined every three days with reapplication of all said components after each observation. The wounds were evaluated for ease of release after the three day lapse for 12 days. Full release was used to report no fibers being left behind and no bleeding. Moderate difficulty was reported if some fibers (<20%) were left behind and some minimal bleeding. Extremely difficult was reported if more than 20% of the fibers were left and/or frank bleeding occurred.

Findings
After three days with the use of the alginate, three reported full release, five of ten reported moderate difficulty with release, two reported extreme difficulty. After six days, one reported full release, seven reported moderate difficulty and three reported extreme difficulty. After nine days, zero reported full release, six reported moderate difficulty and four reported extreme difficulty. After twelve days, zero reported full release, two reported moderate and eight reported extreme difficulty. After three days with the use of the traditional hydrofiber, seven reported full release, and three reported moderate difficulty. Zero reported extreme difficulty. After six days, five reported full release, five moderate and zero extreme. After nine days, three were full release, four were moderate and three were extreme. After twelve days, one was full release, three were moderate and six were extreme. After three days with the use of the high capacity super absorbent with silicone, ten had full release. Zero moderate and zero extreme. After six days, ten had full release, zero moderate and zero extreme. After nine days and twelve days, ten still had full release, zero extreme and zero moderate.

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<th>Alginate findings</th>
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<th>High capacity super absorbent with silicone findings</th>
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Conclusion
The high capacity super absorbent with silicone had a more efficient release from fragile tissues than the comparative hydrofiber and alginate.

*Special thanks to Kane regional and Lafayette Manor for the use of their facilities and to Square One Medical for providing the alginate (SorbapHarmaplast) and the hydrofiber(Aquacel/Convatec) and to Advancis Medical for the High capacity super absorbent with silicone (Eclypse® adherent with Silfix®).