Evaluation of pain at the wound site utilizing a high capacity super absorbent dressing with a silicone release layer versus a traditional hydrofiber and a traditional alginate

Presented by- Diane Heasley, RN, CWCN, WCC, DAPWCA, CNS

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 pain to be experienced. After removal, the tissues can continue to ache. 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 measurement of pain during removal and after sustained usage.

Study overview and past treatment and execution

Thirty residents/patients were followed. All had resolving edema and venous insufficient wounds. All had experienced pain upon dressing change. Ten used the traditional hydrofiber, ten used the alginate and ten used the high capacity super absorbent dressing 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 pain during dressing change after the three day lapse for 12 days. All residents were alert and oriented and could evaluate pain lucidly using a scale of 1-10 with 10 being the worst possible pain. All were pre-medicated for dressing change.

Traditional alginate findings

(numerical scoring indicates a scale of 1-10 with ten being the worst pain possible)

Client #	Day 1	Day 3	Day 6	Day 9	Day 12
1	9	9	8	9	9
2	9	8	9	9	9
3	8	8	8	8	8
4	9	9	9	8	9
5	6	6	8	9	9
6	8	7	9	9	9
7	9	8	9	9	9
8	10	7	7	7	7
9	9	7	9	9	9
10	9	7	8	8	8

Traditional hydrofiber findings

(numerical scoring indicates a scale of 1-10 with ten being the worst pain possible)

Client #	Day 1	Day 3	Day 6	Day 9	Day 12
1	8	6	8	9	9
2	9	6	9	9	9
3	9	5	6	5	6
4	8	7	9	9	9
5	9	5	9	8	8
6	7	7	9	9	9
7	9	6	8	8	9
8	9	5	7	8	9
9	9	6	9	9	9
10	9	5	8	7	7

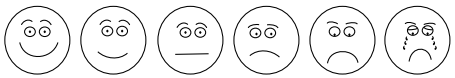
High capacity super absorbent dressing findings

(numerical scoring indicates a scale of 1-10 with 10 being the worst pain possible)

Client #	Day 1	Day 3	Day 6	Day 9	Day 12
1	9	1	1	1	1
2	10	1	1	1	1
3	9	1	1	1	1
4	9	1	1	1	1
5	10	1	1	1	1
6	7	1	1	1	1
7	9	1	1	1	1
8	9	1	1	1	1
9	8	1	1	1	1
10	9	1	1	1	1

Findings

After three days with the use of the alginate, 2 reported a 9, 3 reported an 8, 4 reported a 7, 1 reported a 6. After twelve days, 7 reported a 9, two reported an 8, and 1 reported a 7. After three days with the use of the traditional hydrofiber 2 reported a 7, 4 reported a 6, and 4 reported a 5. After twelve days, 7 reported a 9, 1 reported an 8, 1 reported a 7 and 1 reported a 6. After three days with the use of the high capacity super absorbent dressing with silicone, 10 reported a 1. After 12 days, 10 reported a 1. It is important to note that with the use of the super absorbent with silicone release, a 70% narcotic reduction after dressing



change was achieved compared to the two other modalities.

Conclusion

The high capacity super absorbent with silicone provided more pain relief for fragile tissues than the comparative hydrofiber and alginate.

Special thanks to Kane regional and Friendship Ridge for the use of their facilities and to Square One Medical for providing the alginate (Sorbsan/Pharmaplast), the hydrofiber (Aquacel/Convatec), the three layer sustained compression (Profore/Smith and Nephew) and to Advancis Medical for the high capacity super absorbent with silicone (Eclypse® adherent with Silfix®).

Advancis Medical

www.advancismedical.com