

Evaluation of a hydrophilic foam dressing with soft silicone wound contact layer and border versus wound closure strips and a petrolatum based textile in the expedience of healing of full thickness skin tears

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Problem statement

Skin tears, especially full thickness tears, are very common in the elderly population. As we get older, we lose subcutaneous tissue fat stores, thus making our skin more vulnerable and less elastic as time rolls on. Add the effects of some cardiovascular medications, and this delivers a recipe for disaster. This study evaluates the efficacy and expedience of healing in full thickness skin tears utilizing traditional wound closure strips and a petrolatum based textile versus a hydrophilic foam dressing with soft silicone wound contact layer and border.

Study overview and past treatment and execution

Ten patients were studied, all with full thickness skin tears on their forearms which were flapped and able to be re-approximated with wound closure strips. All were gently cleansed with normal saline during each dressing change. Five utilized the petrolatum based gauze covered with gauze pads and roll gauze being done daily. The other five utilized the hydrophilic foam with a silicone contact layer being done every three days. Healing was measured by percentage of re-epithelialization and scabbing of the wound with a healing ridge. The wounds were followed every three days for twelve days.

Findings

For the petrolatum based dressing group, on day three, all five showed oozing skin tears, on day six, all five were still oozing, on day nine, four of the five remained oozing blood and one was partially scabbed (20%). On day twelve, three of the five remained without epithelial evidence and oozing blood and one was 20% scabbed and one was 30% scabbed.

For the hydrophilic foam dressing with soft silicone wound contact layer and border group, on day three, two remained oozing blood with no evidence of healing and three had 10% scabbing. On day six, one remained moist and three had 20% scabbing and one had 30% scabbing. On day nine, four showed

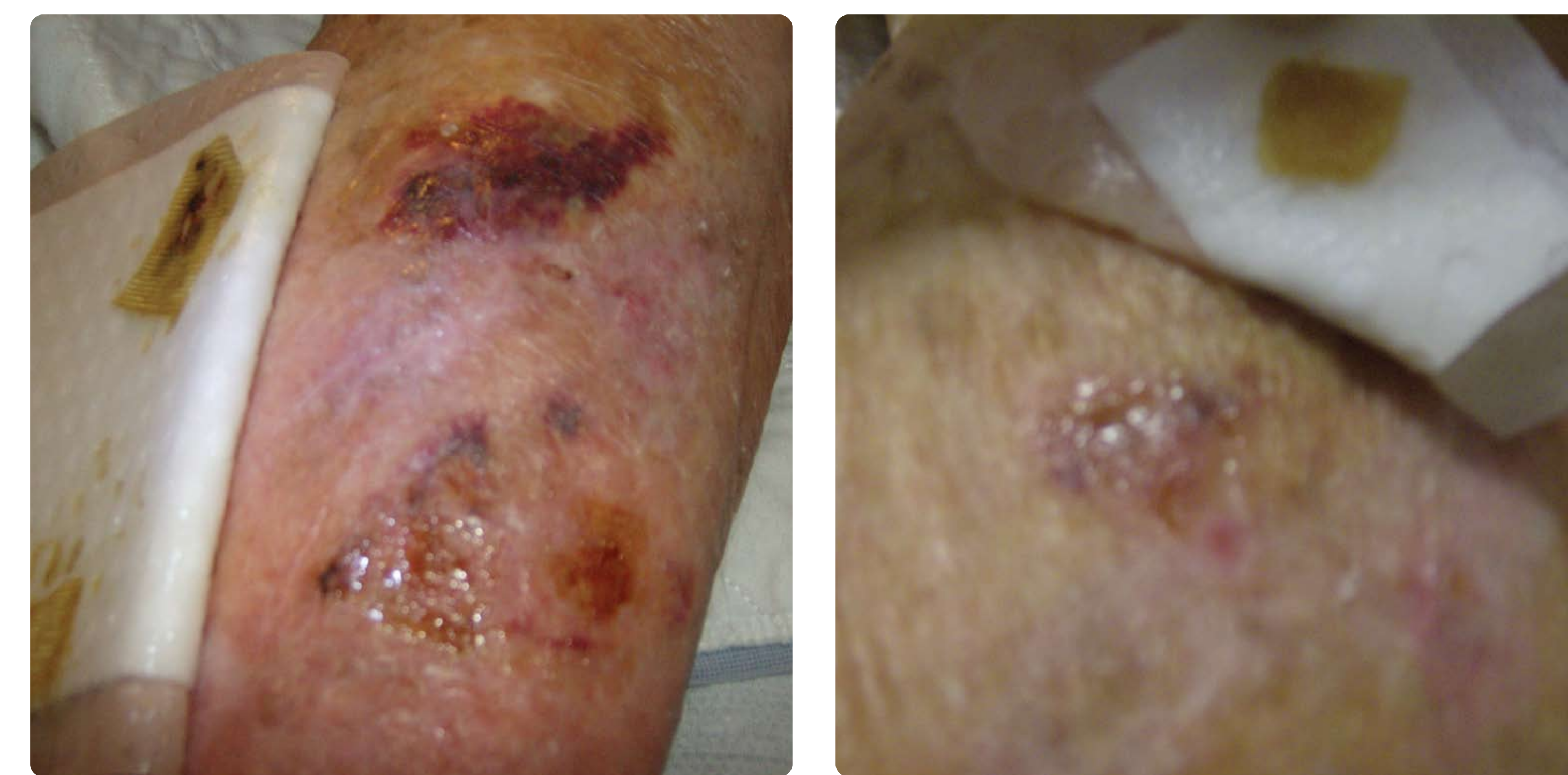
Client	Method	Date	DGE type/AMT*	Scab/epithelialized	Measurements
1		Day 1	mod serosang	no	4.6 x 4 x <0.1cm
		Day 3	same	same	same
		Day 6	same	same	same
		Day 9	min serous	same	same
		Day 12	min serous	20%	4.4 x 2 x <0.1cm
2	Wound closure strips and petrolatum gauze covered with 4x4 gauze pads & roll gauze wrap	Day 1	mod serosang	no	3.6 x 0.1 x <0.1cm
		Day 3	same	same	same
		Day 6	same	same	same
		Day 9	same	same	same
		Day 12	same	same	same
3		Day 1	min serosang	no	6.4 x 0.1 x <0.1cm
		Day 3	same	same	same
		Day 6	same	same	same
		Day 9	same	same	same
		Day 12	same	same	same
4		Day 1	mod serosang	no	3.1 x 0.1 x <0.1cm
		Day 3	min serosang	same	same
		Day 6	same	same	same
		Day 9	same	20%	same
		Day 12	same	30%	2.6 x q x <0.1cm
5		Day 1	min serosang	no	4.8 x 0.1 x <0.1cm
		Day 3	same	same	same
		Day 6	same	same	same
		Day 9	same	same	same
		Day 12	same	same	same

* drainage type/ amount

Client	Method	Date	DGE type/AMT*	Scab/epithelialized	Measurements
6		Day 1	min serosang	no	5.3 x 0.1 x <0.1cm
		Day 3	same	10%	same
		Day 6	same	20%	same
		Day 9	same	30%	same
		Day 12	same	100%	5.3 x 0.1 x 0cm
7	Wound closure strips covered with hydrophilic foam dressing with soft silicone wound contact layer and border	Day 1	mod serosang	no	7.3 x 2 x <0.1cm
		Day 3	same	no	same
		Day 6	min serosang	no	same
		Day 9	same	30%	same
		Day 12	same	60%	same
8		Day 1	min serosang	no	1.8 x 0.1 x <0.1cm
		Day 3	same	10%	same
		Day 6	same	30%	same
		Day 9	same	70%	same
		Day 12	same	100%	1.8 x 0.1 x 0cm
9		Day 1	mod serosang	no	2.7 x 0.1 x <0.1cm
		Day 3	same	no	same
		Day 6	min serosang	20%	same
		Day 9	same	30%	same
		Day 12	same	60%	2.6 x 0.1 x 1cm
10		Day 1	min serosang	no	3.6 x 0.1 x <0.1cm
		Day 3	same	10%	same
		Day 6	same	20%	same
		Day 9	same	30%	same
		Day 12	same	90%	same

* drainage type/ amount

30% scabbing and one showed 70% scabbing. On day twelve, two showed 60% scabbing, one 90% scabbing and two were dried and 100% scabbed with the wound closure strips starting to self-release.



Day 1

Day 12

Conclusion:

The healing rates for full thickness skin tears using the hydrophilic foam dressing with soft silicone wound contact layer and border exceeded those treated with a petrolatum based dressing.

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