

Use of SilvaKollagen® Gel to support autolytic debridement

Background: Debridement is a vital component of wound bed preparation to progress stalled chronic wounds toward healing. Sharp debridement is not always an available treatment option in skilled and home care settings due to availability of qualified caregivers and practice act parameters. Enzymatic debridement with collagenase is a popular alternative in these scenarios, but may be cost prohibitive for many. As a result, clinicians are looking for alternatives to costly enzymatic debridement, such as autolytic debridement with various advanced wound dressings. SilvaKollagen Gel, which supports natural autolysis by rehydrating and softening devitalized tissue thereby supporting autolytic debridement, has been used as one such wound dressing alternative.

Objective: Retrospective analysis was performed on debridement outcomes for 25 skilled nursing and home care patients with wounds of varying “on label”

etiologies/anatomic locations using 5 different wound treatments for 4 weeks to determine if the autolytic debridement groups outcomes were comparable to enzymatic debridement.

Results: Initial total necrotic tissue amounts ranged from 80% to 100% at the start of care. After 4 weeks of treatment, the total amount of necrotic tissue in the wounds ranged from 0% to 90%. The SilvaKollagen Gel (SKG) group began with an average of 98% total devitalized tissue, the highest starting average of any group and decreased to 16% devitalized tissue, the lowest percentage as a group after 4 weeks of treatment. The SKG group demonstrated the highest overall percentage improvement in wound bed characteristics with an 82% reduction in total devitalized tissue amounts. The overall group debridement levels were less than 35% for each of the other 4 debridement methods.

Treatment	Collagenase Based Chemical					Polyacrylate					Leptosperum Honey					Collagen/Silver Sheet					Silver Collagen Gel				
	Patient #	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4
	eschar/slough					eschar/slough					eschar/slough					eschar/slough					eschar/slough				
At Initiation	90/10	0/85	95/5	0/95	0/100	80/10	0/100	0/100	10/80	75/5	95/5	0/100	5/80	0/90	0/80	40/45	0/100	10/80	0/100	30/65	0/100	100/0	80/20	75/15	0/100
Week 1	85/15	0/80	90/10	0/90	0/95	75/15	0/95	0/80	5/80	70/0	90/5	0/100	5/75	0/85	0/80	40/40	0/100	10/70	0/95	20/60	0/85	85/15	70/0	60/20	0/75
Week 2	85/15	0/75	90/5	0/80	0/95	70/15	0/90	0/75	0/75	65/5	90/5	0/95	0/70	0/80	0/70	40/35	0/90	10/70	0/90	20/50	0/75	55/0	40/10	40/15	0/50
Week 3	80/5	0/70	80/5	0/75	0/95	70/5	0/80	0/60	0/70	40/20	85/0	0/95	0/70	0/80	0/60	35/30	0/80	10/60	0/75	15/40	0/55	50/5	15/20	35/0	0/20
Week 4	75/0	0/60	75/0	0/60	0/90	60/5	0/75	0/60	0/65	40/10	80/5	0/95	0/70	0/70	0/55	35/20	0/70	5/60	0/60	15/35	0/15	40/5	0/0	10/5	0/5
	At Initiation		Week 4			At Initiation		Week 4			At Initiation		Week 4			At Initiation		Week 4			At Initiation		Week 4		
Avg. Total % Necrotic	96%		72%			92%		63%			91%		75%			93%		60%			98%		16%		
% Improved	24%					29%					16%					33%					82%				

Conclusion: In this sample, wounds treated with SilvaKollagen Gel for one month had the largest amount of necrotic tissue reduction, or debridement. The SilvaKollagen Gel group experienced autolytic debridement at a faster rate (82%) than the other 4 treatment groups: (enzymatic debridement, polyacrylate

autolytic debridement, leptosperum honey autolytic/osmotic debridement, collagen/silver sheet autolytic debridement) and was the only group to have a wound completely debrided during this time frame.

References:

1. Heasley D. Evaluation of a silver collagen based amorphous gel in expedience of wound debridement. #5124. JWOCN. May/June 2011;38(3S):S18.

