

Evaluation of 100% Manuka honey in expedience of diabetic wound healing versus an 80% Manuka honey based gel with color additives

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

Problem statement

Manuka honey has been heralded in the wound market for providing that “extra something special” for a wound to be invigorated and expediently heal. In the world of vascular ulcers, it has gained wide notoriety. Unfortunately, allergies in humans have become more prevalent. Dyes and other additives can place a wound in to a chronic inflammatory state. This study examines the use of 100% pure Manuka honey versus an 80% gel with additives including color in diabetic wound granulation and healing.

Study overview and past treatment and execution

Twenty residents/patients were included in this study. All had diabetic heel ulcers. Blood sugars were stable and all were insulin dependent. Off-loading of the heels was accomplished so that the patient was non weight bearing. Ten were enrolled to utilize an 80% Manuka honey gel with additives and 10 were enrolled utilizing the 100% Manuka honey free of preservatives. All wounds were cleansed with normal saline and the gel was applied nickel thick. A dry bordered composite was used as a cover dressing. The wounds were evaluated for healing expedience over a period of 12 days with a dressing frequency of every three days. All wounds were free of necrosis with established arterial competence using toe pressure studies.

80% Gel findings (% denotes granulation)

Client #	Day 1	Day 3	Day 6	Day 9	Day 12
1	0%	10%	15%	15%	20%
2	0%	5%	5%	15%	20%
3	0%	5%	5%	20%	20%
4	0%	10%	15%	20%	20%
5	0%	10%	15%	25%	30%
6	0%	5%	5%	15%	20%
7	0%	5%	5%	15%	20%
8	0%	5%	10%	20%	30%
9	0%	5%	5%	15%	20%
10	0%	5%	5%	15%	20%

100% Manuka honey findings (% denotes granulation)

Client #	Day 1	Day 3	Day 6	Day 9	Day 12
1	0%	20%	30%	50%	100%
2	0%	40%	50%	60%	100%
3	0%	20%	30%	50%	100%
4	0%	30%	40%	50%	100%
5	0%	20%	30%	50%	100%
6	0%	20%	60%	70%	100%
7	0%	20%	30%	50%	100%
8	0%	20%	30%	50%	100%
9	0%	20%	30%	50%	90%
10	0%	60%	60%	80%	100%

Findings

After three days, the 80% gel showed a 5% granulation in 7 wounds and 10% in 3 wounds. After 6 days, 5% granulation was noted in 6 wounds, 10% in 1 wound and 15% in 3 wounds. After 9 days, there was 15% in 6 wounds and 20% in 3 wounds and 25% in 1 wound. After 12 days, 20% granulation was noted in 8 wounds and 30% in 2 wounds. After three days, utilizing the 100% preservative free Manuka honey, 7 showed a 20% granulation, 1 a 30% granulation, 1 a 40% granulation and 1 a 60% granulation. After 6 days the 100% gel showed a 30% granulation in 6 wounds, 40% in 1 wound, 50% in 1 wound and 60% in 2 wounds. After 9 days, there was 50% in 7 wounds and 70% in 1 wound and 80% in 2 wounds. After 12 days, 1 wound showed 90% granulation and 9 showed 100%.

Conclusion

The 100% Manuka honey provided superior expedient granulation of diabetic ulcers.

**Special thanks to Vincention Regency in performing these studies and providing the 80% Manuka Honey (Medihoney/ DermaSciences) and to Advancis Medical for providing the 100% Manuka Honey (Activon®).*