

ACUTE POST-SURGICAL AND TRAUMATIC WOUNDS TREATED WITH MEDIHONEY TO DEBRIDE AND AID IN CLOSURE

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INTRODUCTION

This study looks at 4 amputee patients that all continue to mobilise with wounds that have been treated with MEDIHONEY® to improve their outcomes.

PATIENT 1

Patient 1 is a 71 year old type 2 diabetic gentleman who had a left transtibial amputation secondary to diabetic foot ulcers. He also had a cardiac bypass in the past and has a history of peripheral vascular disease. GW was first seen 4 weeks post op following a fall in his bathroom the previous evening. The fall resulted in the wound dehiscing in 3 places (figure 1), (figure 2) and (figure 3.) Initially his residual limb was very oedematous and painful. His diabetic control was optimised and pain controlled with oral analgesics.

METHOD

The wound was initially dressed 3 times a week with MEDIHONEY® wound gel, alginate and secondary dressing in order to encourage the removal of slough.

RESULTS

He initially commenced in the gym with exercises only. 1 week later he commenced in the Pneumatic Post Amputation Mobility Aid (PPAM aid) in order to reduce the oedema. 4 weeks later GW was cast and measured for a prosthesis. 9 weeks following his fall GW was discharged home with wound fully healed (figure 4) and mobile with prosthesis.



Figure 1



Figure 2



Figure 3



Figure 4

DISCUSSION

'Rehabilitation of persons with lower-limb amputation is a complex endeavor that requires the consideration of a multitude of factors'.¹ Wound healing can present a great challenge to the patient and rehabilitation team as 70% of amputations are performed due to peripheral vascular disease and diabetes. If the team waits until full wound healing which may take weeks or months in dysvascular patients there is the risk 'the patient becomes deconditioned and demoralized and may develop joint contractures'.²

PATIENT 2

Patient 2 is a 59 year old lady who had a left transfemoral amputation which was due to an infected knee replacement. She also suffers from hypertension. Patient 2 was admitted 2 weeks post op for rehabilitation but she fell 4 days after admission which resulted in the wound dehiscing. 2 weeks following the fall the wound measured 6.5cm x 2cm and 2 cm deep with thick slough to the base of wound (figure 5 & 6).

METHOD

Treatment was started by packing the wound with Antibacterial Medical Honey and alginate in order to lift the thick slough and secondary dressing was applied. The dressing was changed twice a week.

RESULTS

Patient was able to continue prosthetic rehabilitation. She was cast and measured for her prosthesis the day after the treatment started and was fitted with a trial socket 3 days after that. After 4 weeks of treatment the wound had reduced to 3 x 0.5 x 0.7cm. There was a large reduction in slough which enabled granulation to begin (figure 7).

Patient 2 was discharged home after an 8 week admission with her wound fully healed (figure 8) and mobile with prosthesis and 2 sticks.



Figure 5



Figure 6



Figure 7



Figure 8

PATIENT 3

Patient 3 is a 60 year old type 2 diabetic gentleman who is an established amputee. His bilateral transtibial amputations were performed several years before due to peripheral vascular disease and he lead an active lifestyle. He also has a history of osteomyelitis. He presented in clinic with bilateral knee ulcers as a result of crawling at home. Due to an enlarged prostate he was needing the toilet more frequently at night. His right knee ulcer measured 2.5 x 2.5cm (figure 9).

The treatment plan was to optimise his diabetic control, to reduce the need to crawl, to provide knee protectors and commence dressings.

METHOD

The wounds were dressed with MEDIHONEY® wound gel 3 times a week and a foam adhesive.

RESULTS

After 3 days a significant improvement was seen with reduction in size and granulation tissue (figure 10 & 11) and within 4 weeks of treatment the wounds had healed.



Figure 9



Figure 10



Figure 11

CONCLUSION

Early mobilization improves the circulation to the stump, encourages wound healing and improves general fitness.² Each of these 4 patients have continued to mobilize throughout their treatment and the MediHoney product range has made this possible.

References

- 1 Fiedler G, Akins J, Cooper R, Munoz S, Cooper R. Rehabilitation of People with Lower-Limb Amputations. *Current Physical Medicine and Rehabilitation Reports*, 2014, Vol 2(4), pp 263-272
- 2 VerHoes ER, Johnson S, Abbott CA. Effects of Early Mobilization on Unhealed Dysvascular Transfemoral Amputation Stumps: A Clinical Trial. *Arch Phys Med Rehabil* 2009; 90:610-7

PATIENT 4

Patient 4 is a 69 year old type 2 diabetic lady who had bilateral transtibial amputations due to peripheral vascular disease. The right side was performed 11 weeks prior to her admission for prosthetic rehabilitation and the left side 2 years ago. Patient 4 was on warfarin due to Atrial Fibrillation, has heart failure, chronic kidney disease and COPD. She also has a previous history of a left middle cerebral artery stroke which has left her with a mild right hemiparesis. After her amputation she had a period of general strengthening in a community hospital due to her general deconditioning. This lady was then transferred 11 weeks post op for prosthetic rehabilitation. The aim of her admission was to provide her with a prosthesis for transfers and limited indoor walking. Prior to her second amputation she was able to mobilise with a tripod outdoors. On admission she was found to have a 2.5cm wound on lateral aspect of scar line (figure 12). The patient had fallen in the previous hospital.

METHOD

The wound was dressed twice a week with MEDIHONEY® HCS surgical.

RESULTS

She commenced mobilising in the parallel bars using Pneumatic Post Amputation Mobility Aid (PPAM aid) with her right leg and her prosthesis to the left. 6 days later (figure 13), there was an 80% reduction in the size of the wound and only a minimal amount of slough centrally. The oedema had reduced and the patient was now ready for cast and measures for her prosthesis. 12 days from start of treatment the wound was fully healed (figure 14) and the patient continued with her rehabilitation achieving a level of mobility beyond the original expectation.



Figure 12



Figure 13



Figure 14