Several types of debridement are available for health care professionals but the decision to debride a patient’s wounds lies on the principle that the healing process needs to be improved and accelerated. Many chronic ulcers are covered with slough and/or necrotic tissue, and are painful and challenging to treat because there is no standard protocol that can be applied to all patients. Many often, these kinds of wounds would need to be debrided more than once. We have noticed that after an initial sharp debridement some wounds became again necrotic/ sloughy within 24 hours. Optimal and successful wound management needs a treatment plan according to the wound, patients’ conditions, stage of available resources since a fine line exists between beneficial and harmful debridement.

For the past 10 years we have treated these types of ulcers with an autolytic debridement modality (PMD) due to their unique properties.

PMDs contain a surfactant, superabsorbent starch and glycercin/glycerin, which work synergistically to promote rapid healing and reduction of inflammation. These dressings also facilitate autolytic debridement by loosening bonds between slough/necrotic tissue and healthy granulation tissue.

### METHOD AND RESULTS

The past 10 years we have treated 252 patients with painful necrotic and/or sloughy wounds where autolytic debridement with PMDs was used. A few cases were partially surgically debrided prior to use of PMDs. 92% were surgically debrided after PMDs (moistened with a few drops of sterile saline or water) were applied to the wound in order to soften the necrotic tissue.

Debridement took between 3 and 10 days, depending on type and size of the wound. The approach resulted in a smaller wound to be closed than would have been created by typical aggressive surgical debridement.

In our clinic we focus on continuous debridement, exudate control, prevention of wound trauma and infection as well as pain control. We also take into account changes in the skin such as appearance, structure, mechanical properties and barrier function due to ageing. PMDs help us achieve our goals: as a single treatment modality it’s effective for all phases of wound healing and doesn’t require additional treatments or additives. This made it especially helpful in settings where patients or their family had to perform treatments or additives. This made it especially helpful in settings where patients or their family had to perform treatments at home.

One reason for primarily choosing autolytic debridement was that surgical intervention was often too stressful for patients with low albumin, hemoglobin and iron levels. Enhanced autolytic debridement by PMDs helps us to provide continuous debridement, exudate control, prevention of wound trauma, prevention of infection and pain control. As it is impossible to show all cases here I am presenting a representative selection of cases to show how the single modality treatment.

### REFERENCES

2. Walker JM, MacFie H (2006). Age and Skin structure and function, in a quantitative epidermis, dermis, glycosaminoglycan, and lipid content and structure. Skin Research Technology, 103:3 pp 145-154

### CASE SERIES

#### Painless Enhanced Autolytic Debridement on 252 Wounds by Using Polymeric Membrane Dressings*

*Dr. Charalampos Agathangelou, PhD in Medical Gerontology St. Demetrios, Centre of Assisting Living, Rehabilitation and Wound Care, Dhali, Nicosia, CYPRUS

#### INTRODUCTION

Several types of debridement are available for health care professionals but the decision to debride a patient’s wounds lies on the principle that the healing process needs to be improved and accelerated. Many chronic ulcers are covered with slough and/or necrotic tissue, and are painful and challenging to treat because there is no standard protocol that can be applied to all patients. Many often, these kinds of wounds would need to be debrided more than once. We have noticed that after an initial sharp debridement some wounds became again necrotic/ sloughy within 24 hours. Optimal and successful wound management needs a treatment plan according to the wound, patients’ conditions, stage of available resources since a fine line exists between beneficial and harmful debridement.

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#### DISCUSSION

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#### CASE SERIES

**A 92 year old male, diabetic, with a pressure ulcer infected with MRSA. Previous treatment: i.v. antibiotics and hydrogel dressings. He had no significant changes in the ulcerations and the level of pain was not reduced.**

**Pain score dropped to 3 after use of PMD with no success.**

**A 90 year old female with Alzheimer’s disease with an extensive pressure ulcer.**

**Constant reinforced autolytic debridement of the wound led to a reduction in pain and instigated autolytic debridement.**

**Pain score dropped to 4 after use of PMD.**

**A 50 year old male with Chronic Obstructive Airways Disease.**

**Continuous healing and removal of the yellow slough.**

**Continuous healing and removal of the yellow slough.**

**Infected by MRSA after surgical debridement in the hospital.**

**Pain score reduced to 3.**

**The patient’s pain score is now 3.**

**The yellow slough wound was closed by a PMD moistened with 3 ml saline.**

**Evident of autolytic debridement.**

**Pain score reduced to 3.**

**The patient’s albumin level was very low and we believe that the availability of glycogen within the PMDs allows it to react with energy substrates, creating a more optimal healing environment.**

**Evident of autolytic debridement.**

**The patient reports feeling better.**

**The wound is healing nicely and the exudate level is decreasing.**

**We no longer need to pre-moisten the dressing prior to application.**

**References**

2. Walker JM, MacFie H (2006). Age and Skin structure and function, in a quantitative epidermis, dermis, glycosaminoglycan, and lipid content and structure. Skin Research Technology, 103:3 pp 145-154

**PolyMere:** Wound Dressings with and without Silver Manufactured by Foris Mfg. Corp. 1513 Northeast Parkway, Fort Worth, TX 76106, USA. This case series was unassisted.