

Small but Mighty: Maggot Debridement Therapy in Modern Wound Care

Student Author: Hannah Siren, BSN Student and Faculty Author: Teri Boyd, EdD, MSN, RN, CNE

Acknowledgements – Kailee Sieland, BSN Student, Taylor Tallon BSN Student, Christian Morgan BSN Student; University of Oklahoma, Health Sciences Center, Tulsa, Oklahoma

Introduction

Chronic wounds affect millions of patients, yet it is possible the healthcare community may be overlooking an outcome-changing intervention. Often, in those with chronic wounds, we expect the standard course of treatment, conventional debridement, wound vacs, advanced dressings and other methods. Despite these interventions, wound healing may remain prolonged and incomplete. This can lead to complications that negatively affect patient outcomes. One alternative therapy, maggot debridement therapy, shows promise as an overall less invasive treatment, while also offering unmatched precision in removing necrotic tissue and promoting wound healing as evidenced by granulation tissue (Gaffari et al., 2023). In addition to physical benefits, MDT can provide a cost-effective intervention to the world of wound care.

Significance

As chronic wounds remain a significant concern throughout a multitude of patient populations, the nurse must consider the impact of a chronic wound on a patient's quality of life (Shi & Shofler, 2014). Patients experiencing a chronic wound may find issue with activities of daily living at base level, and in more severe cases, complications such as sepsis, infection, or amputation. From a nursing standpoint, a chronic wound may directly affect nursing care as nurses are greatly responsible for the assessment of the wound, application of dressing, patient responses, and education.

Evidence

In clinical practice, the use of maggot debridement therapy showed a myriad of benefits in patients with chronic wounds (Simonetti et al., 2025; Sun et al., 2024). In comparison to conventional wound debridement, it was found that MDT was incredibly effective in the selective removal of necrotic tissue, while allowing the continued healing of viable tissue. In addition to selective tissue removal, it has been noted that in the use of MDT, an increase in granulation tissue was found in addition to an increased presence of macrophages in the wound bed, which signifies immune function, and healing (Sun et al., 2024). Beyond its debridement and granulation abilities, it has also been noted that MDT can significantly decrease bacterial presence within a wound, which even further supports its healing ability (Simonetti et al., 2025; Sun et al., 2024). From a social standpoint of equity, the cost effectiveness of MDT creates a more accessible option for patients who may struggle with limited financial resources and lower the cost burden on the facility of treatment (Bazaliński et al., 2022).

Risks and Limitations

Research indicates maggot debridement therapy is safe and effective (Simonetti et al., 2025). It is important to consider that although safety is well documented in the use of MDT, it has also been noted that significant pain may be experienced during treatment, therefore, appropriate pain management is strongly indicated (Bazaliński et al., 2024). In addition to considerations of pain management, a

common barrier related to MDT is the 'ick factor'. Many patients experience difficulty with the use of maggots as an intervention in their care, therefore, thorough patient education is of upmost importance, to promote understanding and acceptance of benefits.

Nursing Perspectives

Much like the hesitancy displayed in patient perspectives, there is a significant amount of nursing apprehension towards the idea of MDT (Bazaliński et al., 2022). Many nurses found the application of MDT to be repulsive and provoked a negative response. However, in a study performed by Bazaliński et al. (2022), it was discovered that as education regarding the matter increased, so did the threshold for acceptance and willingness to implement this intervention among the nurse population.

Conclusion

In conclusion, maggot debridement therapy offers a not only safe, but effective approach in the treatment and management of chronic wounds. MDT has shown potential to go beyond standard wound care approaches by providing selective debridement, increases in granulation tissue, and reduction in bacterial load while remaining a cost-effective treatment option. While pain and apprehension towards the therapy remain to be the main opposition, education and appropriate pain management can provide effective mitigation to these concerns. Through continued awareness and research in the healthcare community,

support and acceptance can be achieved, and ultimately, improved patient outcomes. ■

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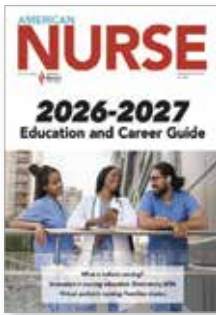
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