

# ***Worms in the wound: A method of the past or the treatment of the future?***

Sassidharen P; Chew YW; Syed Addi Usmi SO

Department of Orthopaedic, Hospital Tuanku Fauziah, Jalan Kolam 01000 Kangar, Perlis, Malaysia.

## **INTRODUCTION:**

Maggot debridement therapy (MDT) is a type of debridement which uses sterile live blowfly larvae (*Lucilia cuprina*) for the treatment of persistent wounds cause by a variety of causes. This method of treatment was started in the late 1920's however slowly out of favour in the advent of antimicrobial drugs and aggressive surgical debridement but regained back popularity in the late 1980s in response to the emergence of antibiotics resistant strains of bacteria.

## **REPORT:**

We report a case of 47 years old gentleman with type 2 diabetes mellitus presented to us with sepsis secondary to wet gangrene of left second toe. Urgent surgical debridement and ray amputation of left second toe was done and post operatively the wound was sloughy (Figure 1) despite regular dressing was done. We proceeded with single cycle of MDT and the result shown marked reduction in slough and increasing granulation tissue over the wound. The wound was then continued with regular hydrogel dressing. Upon review in clinic at 2 months post MDT the wound has fully healed (Figure 2) and patient was able to ambulate normally without pain.



**Figure 1**



**Figure 2**

## **DISCUSSION:**

MDT has the debridement capability and the ability to induce granulation tissue. It has shown to reduce infection and prevent amputation<sup>1</sup>. Teh et al<sup>2</sup> demonstrated that *L cuprina* has superior anti methicillin-resistant *Staphylococcus aureus* (MRSA) activity and thus effective in treating MRSA contaminated wounds and significantly reduced the duration of long term antibiotics.

## **CONCLUSION:**

MDT is effective in the treatment of chronic wounds compared to the alternative hydrogel dressing, significantly reduces healing time, rate of major amputations and duration of antibiotics especially in MRSA contaminated wounds.

## **REFERENCES:**

1. Tian X, Liang XM, Song GM, Zhao Y, Yang XL. Maggot debridement therapy for the treatment of diabetic foot ulcers: a meta-analysis. *J Wound Care* 2013;22(9):462-9.
2. Teh CH, Nazni WA, Nurulhusna AH, Norazah A, Lee HL. Determination of antibacterial activity and minimum inhibitory concentration of larval extract of fly via resazurin-based turbidometric assay. *BMC Microbiol.* 2017;17:36-43.