In association with: NHS Sheffield Teaching Hospitals NHS Foundation Trust

Pathway for Larval Debridement Therapy

Doncaster: To be initiated in Secondary Care or Tier 4 services only. Follow up care can be provided by Tier 3/ District Nurses.
Sheffield: To be initiated in Secondary Care / by relevant CNS only. Follow up care to be provided by District Nurses.

Definition

Larval Debridement Therapy (LDT), known as 'maggot therapy' or 'bio surgery' involves the use of larvae of the green bottle fly, which are introduced to a wound to remove necrotic, sloughy and/or infected tissue. The benefits include the removal of dead tissue, the reduction of bacteria and acceleration of wound healing. Indications for use include diabetic foot ulcers, leg ulcers, pressure ulcers, non-healing surgical wounds, post traumatic wounds and infected wounds (including MRSA).

Assessment

Are there any contraindications such as exposed bowel, high INR, wounds which have a tendency to bleed, close proximity to an artery or patient is unable to offload pressure for the whole treatment duration to avoid suffocation of the larvae?

YES
Does the wound have soft and moist tissue?

NO
Refer to the relevant wound aetiology pathway or T.I.M.E.S pathway.

YES
Does the wound have soft and moist tissue?

NO
Soften the hard dry eschar using autolytic debridement prior to application.

Measure the length, width and depth of the wound to select a Biobag from the 5 available sizes, ensuring the wound bed and margins are covered.

Order and Receive

Doncaster:
Secondary Care: Contact the Skin Integrity Team who will place an order by 2pm for next day delivery .
Primary Care: Contact the Tissue Viability and Lymphoedema Service for ordering.
Sheffield:
Secondary Care: Contact the relevant CNS to order
Primary Care: Contact the relevant CNS to order

On delivery item must be kept in the transit container and stored at room temperature (6-25C). Check the viability of the larvae (they should be cream/beige in colour and still visibly moving) and check the expiry date.

Application

1. Cleanse	2. Protect	3. Apply	4. Moisten	5. Absorb	6. Secure
Cleanse with Normal Saline only				**Doncaster:** Apply a Non-occlusive wound pad(s) (no foams or super-absorbents). **Sheffield:** Apply a Non-occlusive wound pad(s) (no foams or super-absorbents)	Secure the dressing using either tape or a K-Lite bandage
	Apply the protective barrier cream supplied to the peri-wound	Apply the Biobag with direct contact to the wound	Cover with saline moistened gauze		

Daily Care, reassess

Change the outer dressing and saline moistened gauze daily and reapply the protective barrier If needed. Monitor for pain and bleeding.

Reassess the wound at day 3 (72 hours) to decide on further treatment. If LDT is still required due to slough still being present reorder the appropriate Biobag.

Remove and dispose of the Biobag at Day 4 (96 hours) in a secured double bag and dispose as per your organisations contaminated waste policy.

If another Biobag was required and ordered repeat this process (Full debridement usually requires between 1 and 3 treatments).

If the named product on this pathway is not available a temporary second line product is available to use. This can be found within the main text of the Doncaster Wide Wound Care Formulary Document / Sheffield Formulary.

Reference: Biomonde (2017) Assessing a wound for larval debridement therapy. Wounds UK. Developed by the Skin Integrity Team April 2019. Updated September 2026. For review by July 2029.