

# SESLHD PROCEDURE COVER SHEET



**Health**  
South Eastern Sydney  
Local Health District

<b>NAME OF DOCUMENT</b>	Wound Debridement
<b>TYPE OF DOCUMENT</b>	Procedure
<b>DOCUMENT NUMBER</b>	SESLHDPR/348
<b>DATE OF PUBLICATION</b>	February 2023
<b>RISK RATING</b>	Medium
<b>LEVEL OF EVIDENCE</b>	National Safety and Quality Health Service Standards: Standard 5 - Comprehensive Care
<b>REVIEW DATE</b>	February 2026
<b>FORMER REFERENCE(S)</b>	N/A
<b>EXECUTIVE SPONSOR or EXECUTIVE CLINICAL SPONSOR</b>	SESLHD Clinical Stream Director Surgery, Perioperative and Anaesthetics
<b>AUTHOR</b>	Jointly between the SESLHD and ISLHD Wound management committee
<b>POSITION RESPONSIBLE FOR THE DOCUMENT</b>	Andrewina Piazza-Davies Clinical Stream Nurse Manager Surgery, Perioperative & Anaesthetics <a href="mailto:Andrewina.Piazza-Davies@health.nsw.gov.au">Andrewina.Piazza-Davies@health.nsw.gov.au</a>
<b>FUNCTIONAL GROUP(S)</b>	Infection Control, Surgery, Perioperative and Anaesthetic,
<b>KEY TERMS</b>	Wound debridement, necrotic and devitalised tissue, wound bed preparation
<b>SUMMARY</b>	This procedure outlines the scope of practice for nursing staff in relation to wound debridement and management. It provides procedures for all methods of wound debridement used in clinical practice for wounds and stomas including gastrostomy, ileostomy and colostomy.

## **COMPLIANCE WITH THIS DOCUMENT IS MANDATORY**

**This Procedure is intellectual property of South Eastern Sydney Local Health District.  
Procedure content cannot be duplicated.**

Feedback about this document can be sent to [SESLHD-Policy@health.nsw.gov.au](mailto:SESLHD-Policy@health.nsw.gov.au)

**1. POLICY STATEMENT**

This procedure will assist clinicians working in hospital and community settings to appropriately debride wounds within their scope of practice under the direction of the Physician or Wound Care Specialist.

This procedure will improve patient outcomes for people with wounds through the removal of devitalised tissue using appropriate debridement methods. The procedure will outline debridement methods and who can perform them.

Some debridement methods require a level of skill and competence and are techniques that must only be undertaken by clinicians who are providing wound care related to their scope of practice, legislation and can demonstrate advanced wound care skills and clinical competency.

**2. BACKGROUND**

Wound debridement is the removal of adherent, devascularised or infected tissue or foreign material from, or adjacent to, a wound<sup>1,2</sup>. It is important to note that debridement does not only refer to the removal of bioburden from the wound bed, but also from the wound edges and the periwound skin<sup>2</sup>. The benefits of regular debridement for all types of wounds have been shown to be manifold:

- Reduces the bacterial burden and biofilms, and therefore minimises the risk of infection<sup>3,4</sup>
- Promotes health tissue granulation<sup>3</sup>
- Reverts a chronic wound environment to an acute status<sup>3</sup>
- Reduces amount of exudate<sup>4</sup>
- Removes barrier that inhibits the clinician’s ability to assess the wound correctly<sup>5</sup>
- Normalises biochemistry including the matrix metalloproteinase (MMP) balance<sup>2</sup>
- Stimulates wound edges<sup>2</sup>
- Improves quality of life of the patient<sup>2</sup>
- Reduces odour of the wound<sup>2</sup>
- Improves the quality of life of client<sup>1</sup>

A comprehensive assessment to the client, the wound and the environment is vital prior to commencing debridement in order to determine the goal of care, the clinical indications for debridement and the most suitable method of debridement<sup>1</sup>.

**3. DEFINITIONS**

Generalist Practitioners	EN, EEN, RN, who have at a minimum attended basic SESLHD (e.g. POWH wound care course) or ISLHD wound care education and have patient and wound assessment skills and wound product knowledge.
Skilled Practitioner	Minimum education level RN or equivalent, with advance training, who has attended sharp debridement wound care education and has had practical supervision of conservative sharp debridement for a minimum of 3 times and performs this skill as a core function of their role (e.g. SESLHD/ISLHD or an externally facilitated debridement courses).

Wound Care Expert	A person with advanced training in wound management and recognised within the facility for e.g. Wound Care CNC/CNS 2, Stoma/Wound CNC/CNS 2, Clinical Nurse Educators, some Nurse Educators, Podiatrists. In ED, this would include a Nurse Practitioner or CNS with wound portfolio.
Surgeon or Podiatrist	A person with recognised qualifications in surgical skills.

**4. RESPONSIBILITIES**

**4.1. Employees will:**

- Ensure they work within their scope of practice, attend relevant education related to this procedure and practice wound debridement as outlined in this procedure.
- Consult Appendix 1 for decision pathway when considering debridement.
- After completing the holistic assessment of the patient and their wound, staff must discuss treatment plan and obtain informed consent from patient/caregiver as required by the NSW Health policy directive on consent to medical treatment. Consent is required before commencing wound treatment plan and continuously throughout the procedure. If consent is rescinded at any point, treatment must be stopped.

**4.2. Line Managers will:**

- Ensure all clinical staff are given the opportunity to attend District wound management education and that all clinicians work within this procedure and have appropriate resources and stock items to implement the recommendations within this procedure.

**5. UNDERLYING PRINCIPLES**

**5.1. Precautions for wound debridement**

In the following situations, wound debridement should be taken with caution or avoided <sup>1,7</sup>:

- Non-infected ischaemic foot ulcer covered with dry eschar which has inadequate tissue oxygenation to support infection control and wound healing
- In clients whose goal of care is palliation, and necrosis covers vulnerable vascular structure
- In wounds with underlying uncontrolled inflammatory causes (e.g. pyoderma gangrenosum)
- If there is increased risk of bleeding (e.g. during anti-coagulation or anti-platelet therapy) or exposure of blood vessels (e.g. in malignant wounds)
- **Povidone Iodine**
  - Use Povidone Iodine to keep necrotic tissue dry and reduce bacterial load on skin
  - Povidone Iodine must not be used on patients with:
    - Known or suspected allergy or Iodine sensitivity,
    - Hashimoto’s Thyroiditis
    - A history of hyperthyroidism or other thyroid disorders
    - Receiving treatment with radio-iodine therapy
    - Dermatitis herpetiformis
    - Renal impairment
    - Pregnant woman and nursing mothers.

### 5.2. Clinical indicators for wound debridement

- A clear indication for wound debridement starts from the identification of the types of tissue present, bioburden of the wound bed, presence of biofilm, and the condition of the wound edges and the periwound. Accurate assessment of the wound and the exudate levels will assist clinicians to decide on the most appropriate debridement method<sup>2</sup>.
- Other considerations to influence the decision of debridement include patient's pain, the patient's environment, patient's choice, age and quality of life, as well as the skill and resources available to the clinician<sup>2</sup>.

### 5.3. Methods of debridement

- Clinical staff at all times must adhere to hand hygiene principles, preparation of the environment and equipment practice and aseptic technique as per ANTT protocol.
- Consider the debridement method most suitable to the wound type. [See table 1](#) for the advantages and disadvantages of each debridement method and who should debride and where the debridement should take place.
- This procedure does not include “enzymatic debridement” because it is not available in Australia nor recommended as an effective method of debridement.

# SESLHD PROCEDURE

## Wound Debridement

SESLHDPR/348

### Key for Table 1 - Methods of Debridement

Colour:	Green	can be performed by generalist practitioners
Code:	Orange	can be performed by wound care expert
	Dark Orange	can be performed by skilled practitioner with training
	Red	performed by a specialist practitioners with surgical skills - outside nurses scope of practice

**Table1 Methods of Debridement**

Type	Mechanisms of action	Advantages	Disadvantages	Who/Where
<b>Autolytic</b> Refer to <a href="#">Appendix 2</a> (green)	Autolytic debridement is a natural process whereby devitalised tissue is removed by endogenous proteolytic enzymes which soften, break down and dissolve necrotic or sloughy tissue, enabling it to be digested by macrophages <sup>2</sup> . It is supported by optimising moist wound environment through either adding moisture or removing excess fluid to aid the process of autolysis <sup>4</sup> . Autolytic debridement can be aided by using topical agents and contemporary wound dressings <a href="#">appendix 2</a> .	Low cost Generally painless Can be used as preparation for other forms of debridement or for wounds where other forms of debridement are inappropriate. Can be used for maintenance debridement Inexpensive Selective - not harmful to granulating or epithelialising tissue.	The process is slow, increasing potential for infection and maceration. May increase wound drainage and possible odour <sup>2</sup> .	Can be performed by both generalist practitioner and wound care expert.
<b>Mechanical</b> Refer to <a href="#">Appendix 2</a> (green)	The removal of necrotic/devitalised tissue by mechanical means. Examples include wet-to-dry dressings, therapeutic irrigation (4 to 15 psi), pulsation therapy, hydrotherapy, whirlpool procedures, monofilament fibre pads, wound debridement cloth.  Monofilament and debridement pad such as Debrisoft (L&R) and Prontosan (B Braun) debridement pad loosen adherent exudate and necrotic tissue without damaging surrounding skin. They provide a much safer and more effective mechanical debridement <sup>5</sup> .	Soften eschar, appropriate for extensive tissue necrosis. Newer methods can be more selective, faster and relatively pain-free. Effective in disrupting biofilm formation <sup>5,9</sup> .	Non-selective – can cause injury to normal tissue.  Wet-to-dry dressings This method is not recommended because it is non-selective in nature, associates with significant pain, impedes healing, increases risk of infection, and is labour and time intensive <sup>8</sup> .  Expensive options include monofilament and debridement pads, hydrotherapy, whirlpool and mechanical irrigation.	Can be performed by both generalist practitioner and wound care expert.
<b>Bio-surgical (larval/maggot therapy)</b> Refer to <a href="#">Appendix 3</a> (green)	Larvae of green bottle fly are used to remove necrotic and devitalised tissue from the wound by secreting collagenases and trypsin enzymes which liquefy dead tissue which is then digested by the larvae outside their body <sup>1,8</sup> . The digestive enzymes also have the ability to prevent, inhibit, and break biofilms of many bacteria, except pseudomonas and some other Gram-negative pathogens <sup>8</sup> .	Highly selective and rapid. Great tool for supplementing surgical treatment or as a primary therapy for patients not suitable for surgery <sup>10</sup> . Effective in disrupting biofilm formation <sup>6</sup>	Sterile larvae may be difficult to obtain <sup>1</sup> . Maybe socially not acceptable <sup>1</sup> . A slight pyrexia may occur as a result of lysis of bacteria by larvae <sup>1</sup> . Irritation may occur if enzymes come in contact with periwound skin <sup>1</sup> .	Can be performed by both generalist practitioner and wound care expert with training.

# SESLHD PROCEDURE

## Wound Debridement

SESLHDPR/348

<p><b>Chemical</b> (orange)</p> <p><u>Not recommended, alternative methods can be used</u></p>	<p>The application of chemical agents to degrade non-viable tissue. The most common chemical agents used are hyperchlorite solutions such as Edinburgh University Solution of Lime (EUSOL), Dakin solution and hydrogen peroxide.</p> <p>Care must be taken to avoid contact with surrounding healthy tissue<sup>1</sup></p>	<p>Bactericidal effect</p>	<p>Chemical agents containing hypochlorite or hydrogen peroxide is often not recommended due to the high cytotoxicity to healthy tissue.</p> <p>Hydrogen peroxide may cause an air embolism if delivered into a sinus tract.</p> <p>Safer alternative wound debridement methods are recommended<sup>1</sup></p>	<p>Must be performed by a wound care expert</p> <p>Care must be taken when determining dilution of the products to ensure viability of fibroblasts.</p>
<p><b>Ultrasonic</b> (orange)</p>	<p>Devices deliver low frequency ultrasound between 20 and 40 kHz either in direct contact with the wound bed or via an atomised solution (mist). Most devices include a built-in irrigation system and are supplied with a variety of probes for different wound types<sup>1</sup></p>	<p>Immediate and selective. It can be used for excisional debridement and/or maintenance debridement over several sessions.</p> <p>Effective in disrupting biofilm formation<sup>3</sup></p>	<p>Availability issues due to higher costs and requirement for specialist equipment. Requires longer set up and clean up time (involving sterilisation of hand piece) than sharp debridement</p>	<p>Must be performed by a wound care expert with specialist training in a variety of settings.</p>
<p><b>Hydro-surgical</b> (orange)</p>	<p>Removal of dead tissue using a high energy saline beam as a cutting implement, such as Versajet ® (Smith &amp; Nephew)<sup>1</sup></p>	<p>Short treatment time and selective. Capable of removing most if not all devitalised tissue from the wound bed.</p>	<p>Requires specialist equipment. There is potential for aerosol spread and it is associated with higher costs.</p>	<p>Must be performed by a wound care expert with relevant training.</p> <p>Can be used in a variety of settings.</p>
<p><b>Conservative Sharp Wound Debridement</b> Refer to <a href="#">Appendix 2</a> (dark orange)</p>	<p>Removal of dead or devitalised tissue using a scalpel, scissors and/or forceps to just above the viable tissue level. This may not result in total debridement of all non-viable tissue and can be undertaken in conjunction with other therapies (e.g. autolysis)<sup>3</sup>.</p>	<p>Selective and quick. Analgesia is not normally required.</p> <p>Cost effective.</p> <p>Can be done by bedside or in procedure room<sup>3</sup>.</p> <p>Effective in removing biofilm depending on the depth of the biofilm<sup>6</sup>.</p>	<p>Clinicians need to be able to distinguish tissue types and understand anatomy as the procedure carries the risk of damage to blood vessels, nerves and tendons.</p>	<p>Can be performed at the patient's bedside or in a clinic by a skilled practitioner with specialist training.</p> <p>Skill assessment required as per individual facilities.</p>
<p><b>Surgical</b> (red)</p>	<p>Excision of wider resection of non- viable tissue, including the removal of healthy tissue from the wound margins, until a healthy bleeding wound bed is achieved.</p>	<p>Selective and is best used on large areas where rapid removal is required.</p> <p>Effective in removing biofilm<sup>6</sup>.</p>	<p>Painful, anaesthetic is required.</p> <p>Longer recovery time</p>	<p>Must be performed by a surgeon or podiatrist for foot care.</p>

# SESLHD PROCEDURE

## Wound Debridement

SESLHDPR/348

### 6. DOCUMENTATION

In the patient’s medical record document as per SESLHD requirements.

Use eMR wound template when available or appropriate wound care paper-based form.

Examples of eMR wound documentation include:

- Wound Assessment Treatment Evaluation Plan (WATEP) (SESLHD Community Health)
- eRIC wound template for ICU in-patients
- iView wound template
- Wound Assessment and Management form (SE1060.118)

- Any additional comments are to be recorded in the patient’s health care record
- Transfer documentation e.g. from community to hospital or vice versa
- Discharge letters should include wound assessment and management plan information.

### 7. AUDIT

Not required

### 8. REFERENCES

#### 8.1. Internal references

- SESLHDPD/146 - Wound - Antiseptic dressing policy
- SESLHDPR/285 - Wound – Clinical Digital Photography
- SESLHDPR/437 - Wound - Managing pain at dressing change
- SESLHDPR/398 - Wound – Graduated Compression Therapy in Venous Disease
- SESLHDPR/728 - Wound - Negative Pressure Wound Therapy
- [Clinical Excellence Commission Infection Prevention and Control Practice Handbook](#)
- [NSW Health Consent to Medical and Healthcare Treatment Manual.](#)
- [NSW Health Policy Directive PD2017\\_032 - Clinical Procedure Safety](#)

#### 8.2. External references

Number	
1	Carville, K. 2017. Wound Care Manual, 7 <sup>th</sup> edition, Silver Chain foundation.
2	Strohal, R., Apelqvist, J., Dissemond, J. et al. 2013. EWMA Document: Debridement. J Wound Care, 22 (Suppl. 1), S1–S52.
3	Thomas, D.C., Tsu, C.L., Nain, R.A., Arsat, N., Fun, S.S., & Sahid Nik Lah, N.A. 2021. The role of debridement in wound bed preparation in chronic wound: A narrative review. Annals of Medicine and Surgery. 71. <a href="https://doi.org/10.1016/j.amsu.2021.102876">https://doi.org/10.1016/j.amsu.2021.102876</a>
4	Atkin, Leanne. 2014. Understanding methods of wound debridement. British Journal of Nursing. 23 (sup12). S10-S15.
5	Lumbers, M. 2018. British Journal of Nursing, 27(15), S16-S20.
6	Wounds Australia. 2016. Standards for Wound Prevention and Management. 3rd edition. Cambridge Media: Osborne Park, WA.

## Wound Debridement

SESLHDPR/348

7	International Wound Infection Institute (IWII). 2022. Wound Infection in Clinical Practice: Principles of Best Practice, 3 <sup>rd</sup> edition. Wounds International.
8	Ovington LG. 2001. Hanging wet-to-dry dressings out to dry. Home Healthcare Now, 19(8):477-83.
9	Wounds UK. 2017. Best practice statement. Making day-to-day management of biofilm simple. London: Wounds UK.
10	Jordan, A., Khiyani, N., Bowers, S. R., Lukaszczyk, J. J., & Stawicki, S. P. 2018. Maggot debridement therapy: A practical review. International Journal of Academic Medicine, 4(1), 21.



# SESLHD PROCEDURE

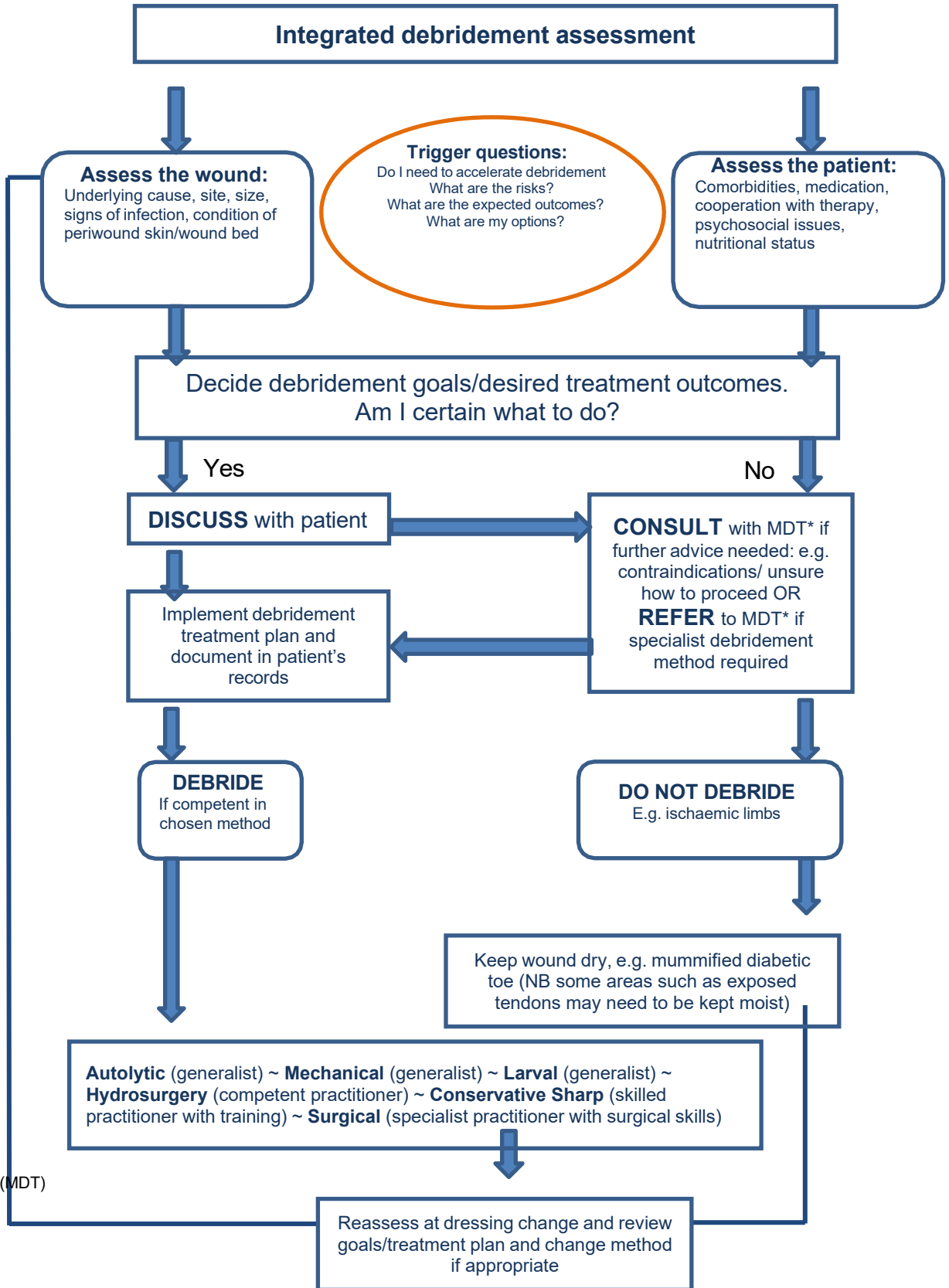
## Wound Debridement

**SESLHDPR/348**

### 9. REVISION AND APPROVAL HISTORY

Date	Revision	Author and Approval
December 2014	1	SESLHD and ISLHD Wound Management Committee
June 2015	1	Endorsed by SESLHD Clinical and Quality Council Committee
September 2018	2	Routine review as per local governance – nil changes required
September 2019	3	Minor review approved by Executive Sponsor. Routine review as per local governance and addition of clinical information relating to mechanical debridement on monofilament fibre pads and debridement wipe/cloth. Published by Executive Services.
December 2022	4	Minor review. Approved by Executive Sponsor.
February 2023	4.1	Advice received: SESLHD QUMC approval not required. Formatted and published.

Appendix 1: Decision pathway for nurses considering debridement (adapted from Wounds UK 2013)



\*Multi-disciplinary team (MDT)

**Appendix 2: Debridement method procedures**

**Autolytic debridement**

**Wound Care Products:** Examples include but not limited to; Hydrogels; Hydrocolloid sheets/pastes; Hypertonic Saline Impregnated dressings; Alginates, Fibre gelling wound dressings, medical honey, Polyhexamethylene biguanide (PHMB) dressings.

**Mechanical debridement**

**Wet to dry gauze application:**

- The traditional method involves using wet to dry gauze that dries and adheres to the top layer of the wound bed which is 'pulled' away when the dressing is removed.
- This method is not recommended because it is non-selective in nature, associates with significant pain, impedes healing, increases risk of infection, and is labour and time intensive.

**Whirlpool**

- Equipment: 1-2litres sterile 0.9% Saline/water and sterile bowl
- Place limb with wound into the bowl of fluid and ask patient to agitate the fluid for 15mins to gently debride wound devitalised tissue
- Redress the wound as per wound assessment and management plan

**Monofilament fibre pads**

Before commencing this debridement method, review precautions as documented in conservative sharp wound debridement (CSWD) section as the same precautions will apply.

- Pre-moisten pad - apply 30ml of sterile water or normal saline or wound cleaning solution onto fibre side of pad
- Apply the soft fibre side against the wound.
- Use gentle pressure and a circular motion on the wound bed to lift debris
- Clean the skin surrounding the wound using a sweeping motion. Note it may be necessary to use a clean moistened pad for this step
- Dispose of the used pad/s

**Debridement wipe/cloth – sterile gloves should be worn for this procedure**

- Open sachet to access pre-moistened debridement cloth
- Cut a small portion of the cloth without causing fibre shed, to use on the peri wound area
- If hyperkeratosis or devitalised tissue present in wound, place cloth over the area to allow contents to soften and hydrate the hardened section
- Wrapping the debridement cloth around your gloved finger move over the wound in a gentle polishing action
- When the debridement cloth becomes clogged move on to the next section of the cloth
- Use the debridement cloth until the required degree of debridement has been achieved
- Both sides of the cloth can be used
- Once the wound has been cleaned and debrided the unused remainder of the debridement cloth can be used to clean the surrounding skin
- Debridement cloth is safe to use in all types of wounds, including cavity or tunnelling / sinus wounds, simply wrap it around a gloved finger to reach difficult areas.

**Conservative Sharp wound debridement (CSWD)**

- CSWD of devitalised tissue through the use of curette, scalpel or scissors is considered the quickest and most cost-effective method of wound debridement
- However, it carries a high level of clinical risk and may not be appropriate for all patients or in all settings

- The health-care profession must work within their scope of practice
- The health-care profession must have attended a CSWD course and been given education on CSWD including an understanding of caution and contraindicated associated with CSWD
- The health-care profession must be responsible for their own practice standards and work within their own levels of competency and also meet the standards for CSWD set by their institution

**CSWD should be carried out with caution (in collaboration with the patients' Interdisciplinary team) if:**

- Haemoglobin, absolute neutrophil count, APPT, INR or platelet counts outside of normal limits as determined by the institution
- Underlying structures such as bone, ligament and/or tendons cannot be clearly identified or are exposed
- The interface between the viable and non-viable tissue cannot be clearly identified
- There is a below-knee, non-infected, ischaemic ulcer, covered with a dry, stable eschar and the goal of healing is maintenance rather than healing
- The wound is on the face or hands
- There is evidence of moderate to severe arterial compromise (Ankle Brachial Pressure index < 0.80 and >1.2)
- The client has an untreated systemic infection
- The client has significant wound pain or pain associated with debridement
- The client has diabetics
- The client takes anti-platelet and/or anticoagulation medication

**CSWD could be considered if:**

- There are one or more types of devitalised tissue present in a wound which impair the healing process
- There is advancing cellulitis or sepsis associated with devitalised tissue
- Wound odour is related to devitalised tissue
- Biofilm is present in the wound bed
- The wound is chronic and stuck in stage 2 of wound healing e.g. Senescent cells

**Appendix 3: Larval Therapy**

Maggots used for wound debridement are disinfected and will only consume dead tissue and wound debris in addition to destroying bacteria. Patients must receive appropriate education prior to commencing larval therapy. Patients allergic to fly larvae, chicken eggs, or soybeans may develop allergies to the maggots. The maggots available are vials of disinfected maggots of the fly species *Lucilia sericata* as a form of wound bed preparation. Each vial contains a piece of moistened sterile gauze (5 x 5cm) and approximately 100 young maggots.

The maggots should be used soon as possible after delivery, or stored in a refrigerator at 4-8 degree Celsius for no longer than 48 hours as their viability may be affected

Before maggots are applied to the patient:

The wound site is cleaned and the surrounding skin is prepared using barrier wipes. A transparent hydrocolloid dressing (e.g. Comfeel transparent® or Duoderm extra thin®) should be cut to surround the outer perimeter of the wound. This acts:

- to protect the surrounding skin
- to prevent crawling sensation
- as a base for the sealed dressing.

Prepare a film such as Tegapore®, Opsite® or Tegaderm® which has been perforated with 10 holes/5cm<sup>2</sup> using a sharp probe. It is important the maggots have access to air or they will suffocate.

Larvae are applied to the wound by a health professional.

To apply maggots to the wound site, wipe the maggots from the container with the enclosed gauze using forceps or with sterile gloved fingers. A small amount of sterile saline can be used to rinse the remaining maggots from the vial onto the wound site. It is recommended that around 5-8 maggots/cm<sup>2</sup> are introduced to the wound.

The wound is then covered loosely with moist **non-woven gauze** and then covered with the prepared film dressing (e.g. Tegapore®, Opsite® or Tegaderm®). The resulting liquefied necrotic tissue should be able to drain out through the dressings. Secure the film with a waterproof tape (e.g. sleek). This provides a completely sealed dressing with reduced likelihood of maggot escape.

It is recommended dry gauze pads be placed over the porous dressings to absorb the draining fluid. The gauze should be changed at least daily and when required dependant on exudate level. Maggots will not survive if they are too wet.



To secure the outer pads use orthopaedic wool (e.g. Sofban®). Apply these lightly to prevent suffocation or injury to the maggots.



The patient must be prevented from bearing weight on the wound site (e.g. on the sole of the foot) as this will damage the maggots. Heel wounds can benefit from a splint or support that prevents the heel from making contact with the mattress. Patients should avoid immersing the wound in water or placing the wound too close to a heat source.

Maggots will not develop into flies within the wounds. It takes 10-14 days for a newly hatched maggot to complete its life cycle and turn into a fly. Dressings will be changed every 3-4 days so the fully grown larvae will be removed well before they are ready to pupate.



**How long are the maggots left on the wound?** The maggots can be left on the wound site for 48-72 hours. Maggots will try to escape from the wound but a well-sealed dressing will usually prevent this. Escaping maggots pose no problem and can be easily destroyed. Patients must be educated and reassured on this. It is uncommon for patients to feel the maggots in the wound and experience any side effects from the therapy.

After the maggots are removed, the wound site is washed with sterile saline before another new supply of young maggots is applied and the above dressing procedure repeated.

**How do I dispose of the maggots?** When the dressing is removed, the maggots in the dressings are placed in a contaminated waste bag. Any stray maggots remaining in the wound can be removed with forceps or washed out with sterile saline. After use, the maggots should be handled as other potentially infectious material and placed in a sealed plastic bag inside a contaminated waste bag and taken to pathology for autoclaving.

**Costs:** Each vial contains approximately 100 maggots and has a cost of \$150.00 (+GST) [correct as of July 2019]. An additional overnight courier fee will be included which varies depending on destination.

**How are the maggots sent?** The vials of maggots are sent in specimen jars inside a polystyrene esky with at least one ice brick to maintain a cool environment. Eskies are placed within a sturdy cardboard box; the total weight of the package 500 grams. Overnight or same-day delivery courier service is recommended to ensure maggots survival.

**Storage on site,** Maggots should be used as soon as received and must be used within 24 hours of dispensing from Westmead Hospital. If maggots are not to be used immediately, upon receipt store them in a Fridge (preferably vaccination fridge) at 4°C, if possible maggots should remain in their esky within the fridge.

**Maggots are available from Westmead Hospital, Sydney by phoning**

**Maggot supply:** John Haniotis Office: 8890 7265 Email: [John.Haniotis@health.nsw.gov.au](mailto:John.Haniotis@health.nsw.gov.au)

**Medical advice:** Dr. Kai Dang Office: 8890 7265 Email: [Kai.Dang@health.nsw.gov.au](mailto:Kai.Dang@health.nsw.gov.au)

**Nursing advice:** Paula Tolentino Vascular CNC Mob 0409 982 745 Email: [Paula.Tolentino@health.nsw.gov.au](mailto:Paula.Tolentino@health.nsw.gov.au)

# SESLHD PROCEDURE

## Wound Debridement

**SESLHDPR/348**

### References

R.A., Sherman. 2009. Maggot Therapy takes Us Back to the Future of Wound Care: New and Improved Maggot Therapy for the 21st Century. J. Diabetes Sc. & Tech., Vol.3 Issue 2, March.

W. Fleischmann, M. Grassberger, R. Sherman. 2004. Maggot Therapy: A Handbook of Maggot-Assisted Wound Healing. Thieme Medical Publishers. 85pp.

M.J., Geary, A. Smith & R.C., Russell. 2009. Maggots down under. J. Wound Pract. & Research. Vol. 17, No.1, Feb.

### Web Sites

General Information on MDT: <http://www.monarchlabs.com>

Patient & carers' guide: <http://www.biomonde.com>

### Frequently Asked Questions

**“Can the maggots damage healthy tissue?”** No, maggots will consume only dead tissue and wound debris, they do not burrow into healthy tissue.

**“Will the maggots develop into flies within my wound?”** No, maggots require a dry dark environment for the next stage of their lifecycle, nor can maggots reproduce and multiply in a wound.

**“Aren't maggots dirty?”** No, the maggots are disinfected and actually feed on and destroy the bacteria in a wound. Each vial of maggots must pass a microbiology screen before they are released for patient use. A pathology report is issued with each shipment.

**“Will I be able to feel them & is it going to hurt?”** It is uncommon for patients to experience any side effects. Most patients are unaware of their presence, although there are claims of a tickling sensation. Patients with poor circulation may experience some pain during the therapy but this can be controlled with medication

**“What happens if the maggots escape?”** Nothing, maggots are harmless and easily destroyed. The restrictive dressings are designed to keep them at the wound site.

**“How big are the maggots?”** The maggots placed on the wound are no bigger than a grain of rice, at the end of the therapy they will have increased in size.

**Reference:** Fact Sheet Version, 7-July 2022 Westmead Hospital, NSW