The Walton Centre Wound Management Guidelines and Formulary

General Guidance
For further information see Hospital Intranet or contact, Sue Noon Tissue Viability Nurse (extension 5599 bleep 5437)
The following notes summarise the key principles of wound care and are followed by a listing of the products recommended for use within The Walton Centre.

Hand washing/Cleansing
See the Walton Centre Control of Infection Guidelines
Thorough hand washing is one of the most important factors in preventing wound infection; hands should be washed and dried before and after contact with any wound.

Covering of wounds
Wounds, once covered, should be exposed as infrequently as possible. Reasons for exposing a wound include:

- Observation of the wound for complications.
- Removal of excess exudate.
- Removal of dead tissue.
- Removal of drains or sutures.
- Treatment of local infection

For a discharging wound the dressing must be changed often enough to avoid contamination of its surface. However, dressings should always be carried out with minimum disruption to the healing wound, and it should be remembered that antiseptics may damage healing tissue as well as killing bacteria. The dressing of a wound should not be carried out within 30 minutes of dusting or bed making.

Criteria for Choosing a Dressing In Order of Importance
(Miller & Collier, 1997)
1) Choose a dressing that maintains a moist environment at the wound bed.
2) (The only exceptions are peripheral necrosis secondary to arterial disease).
3) Choose a dressing that is able to control (remove) exudate. A moist wound environment is good; a wet environment is not beneficial.
4) Choose a dressing that does not stick to the wound and cause trauma on removal
5) Choose a dressing that protects the wound from the outside environment
6) Choose a dressing that will aid debridement if there is necrotic or sloughy tissue in the wound. (With exception of ischaemic wounds)
7) Choose a dressing that will keep the wound close to normal body temperature
8) Choose a dressing that is acceptable to the patient
9) Choose a dressing that is cost-effective
10) Diabetes – choose a dressing that will allow frequent inspection

Wound Cleansing
Normal saline has been identified as the treatment of choice for most wound cleansing (Dealey 1999) as it is isotonic so does not donate or withdraw fluid from the wound (Davies 1999)

In cases where wound cleansing is necessary, warm normal saline should be used. Cell mitosis is inhibited by cooling the wound and may actually delay healing (Lock, 1980).

TIME Concept
Wound Bed Preparation uses four principles in the acronym T.I.M.E which provides a systematic approach to the management of wounds, by focussing on each stage of wound healing. By removing these local barriers, the wound can progress to healing. T.I.M.E is based on intervention in four clinical areas and leads to an optimal, well vascularised wound bed.

<table>
<thead>
<tr>
<th>T</th>
<th>Tissue non-viable or deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the wound contain non-viable tissue such as necrotic tissue, slough, non-viable tendon or bone?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>I</th>
<th>Infection or Inflammation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the wound have signs of bacterial contamination, infection or inflammation?</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>M</th>
<th>Moisture Imbalance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the wound have excess exudate or is the wound too dry?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E</th>
<th>Edge of wound non advancing or undermined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are the edges of the wound undermined and is the epidermis failing to migrate across the granulation tissue?</td>
<td></td>
</tr>
</tbody>
</table>
**Wound Healing Continuum**

The wound healing continuum – uses colour to show the tissue present in the wound and how the wound should progress.

The normal progression of a wound is to move from black to pink. An estimate of the amount of each colour can be given to indicate an improving wound. Exact amounts are not required as long as the general movement is from left to right and in an expected time given in the care plan. Levels and thickness of exudate provide a key indication of the presence of bacteria. Thick exudate in high volumes can be expected if you have large amounts of necrotic sloughy tissue present. However as the wound progresses exudate should become thin and reduce in amount. If the exudate from the wound increases or becomes more purulent/offensive this can be a sign of infection.

**Offensive Odours**

1) May indicate that the frequency of dressing change needs to be increased.
2) May indicate infection and the patient may require a systemic antibiotic.
3) In exceptional circumstances metronidazole solution may be prescribed to irrigate the wound. Do not soak gauzes in the solution and apply - this will cause resistance.

For fungating malodorous tumours the use of metronidazole gel *(Metrotop®)* should be considered.
Tissue Types

Hard Black Eschar

Stable (dry, adherent, intact without erythema or fluctuance) eschar on the heels serves as “the body's natural (biological) cover” and should not be removed (EPUAP 2009).

<table>
<thead>
<tr>
<th>Description</th>
<th>Objective</th>
<th>Dressing Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard black /brown appearance</td>
<td>To rehydrate eschar and reduce risk of infection</td>
<td>Hydrogel, Hydrocolloid</td>
</tr>
</tbody>
</table>

Necrotic lesions in diabetic foot ulcers should be treated cautiously. Dry necrotic toes should be left dry and allowed to separate naturally. Due to the increased risk of infection and amputation, necrotic lesions on feet should be left dry until a full foot assessment has been performed by Podiatry. Referral to Tissue Viability for assessment is essential.
Black Wet Necrotic Wound

<table>
<thead>
<tr>
<th>Description</th>
<th>Objective</th>
<th>Dressing Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black, green, yellow wet tissue</td>
<td>Hydrate to assist removal of devitalised tissue</td>
<td>Hydrogels</td>
</tr>
<tr>
<td>Malodourous</td>
<td>Remove slough to enable wound to granulate</td>
<td>Hydrocolloids</td>
</tr>
<tr>
<td></td>
<td>Prevention of infection</td>
<td>Hydro-fibre</td>
</tr>
<tr>
<td>Odour and exudate management</td>
<td></td>
<td>Antimicrobials</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(with caution and TVN advice)</td>
</tr>
<tr>
<td>Protection of surrounding skin using barrier</td>
<td></td>
<td>Larvae therapy (TVN advice only)</td>
</tr>
</tbody>
</table>

**Exception**

Due to the increased risk of infection and amputation, necrotic lesions on feet should be left dry until a full foot assessment has been performed. **Referral to Tissue Viability for assessment is essential.**
<table>
<thead>
<tr>
<th>Description</th>
<th>Objective</th>
<th>Dressing Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow/green/black slough</td>
<td>Remove slough to encourage wound to granulate</td>
<td>Hydrogels/hydro-fibre with foam secondary dressing</td>
</tr>
<tr>
<td>Wet and possibly malodorous</td>
<td>Prevention of infection</td>
<td>Hydrocolloid</td>
</tr>
<tr>
<td></td>
<td>Odour and exudate management</td>
<td>Antimicrobial dressings (TVN advice)</td>
</tr>
<tr>
<td></td>
<td>Protection of surrounding skin using barrier</td>
<td>Larvae therapy (TVN advice only)</td>
</tr>
</tbody>
</table>
Red Granulation Tissue

<table>
<thead>
<tr>
<th>Description</th>
<th>Objectives</th>
<th>Dressing Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red colour with visible granulation buds</td>
<td>Maintain a moist wound healing environment,</td>
<td>Hydro-fibre/alginate</td>
</tr>
<tr>
<td>No slough or discoloured tissue</td>
<td>Encourage granulation tissue</td>
<td>Foam secondary dressing</td>
</tr>
<tr>
<td></td>
<td>Reduce exudate.</td>
<td>If cavity present:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hydro-fibre to loosely fill the wound to encourage granulation tissue, will also aid autolytic debridement if sloughy</td>
</tr>
<tr>
<td></td>
<td>Protect from infection and trauma</td>
<td>V.A.C (TVN assessment only)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hydrocolloid for superficial wounds</td>
</tr>
</tbody>
</table>
## Epithelial Tissue

<table>
<thead>
<tr>
<th>Description</th>
<th>Objectives</th>
<th>Dressing Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink, fragile tissue</td>
<td>Reduce friction and maintain skin integrity</td>
<td>Hydrocolloid</td>
</tr>
<tr>
<td></td>
<td>To continue to encourage new tissue and allow final stage of healing</td>
<td></td>
</tr>
</tbody>
</table>
Hyper-granulation Tissue - is believed to occur as a result of an extended inflammatory response.

Granulation usually occurs in an orderly, if occasionally, slow manner in the majority of wounds, in others it can become disorganised resulting in the production of a protruding mass of granular tissue, which appears to inhibit wound closure. This ‘over-granulation’ can be unsightly and distressing to patients, as well as posing a management challenge to clinicians.

There appear to be a number of factors that could initiate an over-granulation response and will dictate how it is treated

Infection/high bio-burden - If the precipitating factor is the presence of high bacterial burden, either as critical colonisation or local, sub-clinical wound infection, there is a need to redress the bacterial balance. Systemic antibiotics are effective in reducing bacterial load but may be associated with systemic complications and are not indicated for the treatment of colonisation and localised wound infection (World Union of Wound Healing Societies [WUWHS], 2008; Best Practice Statement, 2010), unnecessary treatment with antibiotics may also contribute to antibiotic resistance.

Reaction to foreign bodies - The presence of foreign material within a wound can lead to prolonged inflammation as the body seeks to overcome a perceived threat to tissue integrity. Repeated trauma through friction and traction on the wound can lead to inflammatory reactions (Hanlon and Heximer, 1994) such irritation can be commonplace in gastrostomy and tracheostomy site wounds and may account for the frequency with which over-granulation is seen in these wounds (Vuolo (2010)

Allergy/hypersensitivity - A number of wound products, such as adhesives and some antimicrobial agents have the potential to trigger an immune reaction in some susceptible individuals. This immune response acts as a focus of continued inflammation until the causative ingredient is removed.

Poor moisture control – if the principle cause of over-granulation is poor moisture control and oedema, steps should be taken to manage this. The use of higher absorbency or less occlusive dressings enable improved exudate management, thereby preventing tissues becoming saturated with fluid (Dunford, 1999).
Treatment Options

The use of higher absorbency or less occlusive dressings enable improved exudate management,

The application of local pressure may also assist in forcing fluid out of the tissues and so ‘flattening’ any raised areas, use of double (plain) foam dressings can assist with this.

In the absence of infection, the use of topical steroids should be considered.

Topical antimicrobial products have a more localised effect and may be effective at reducing bacterial burden without affecting systemic flora. This makes them an effective tool in wound care; however, their use should be limited to a 10–14-day period.
Skin Tears

At Risk/Fragile Skin

The epidermis (outer layer of the skin) is separated from the dermis (inner layer of the skin), or both the dermis and the epidermis are separated from the underlying tissue. Tears can be simple such as a linear injury, or be more complex, with include tissue loss haematoma and bruising. Skin tears mainly occur on the arms and legs, but can occur on any area that is knocked or scraped.

<table>
<thead>
<tr>
<th>Description</th>
<th>Objectives</th>
<th>Dressing Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>A skin tear usually occurs in the elderly or those with fragile skin, as a result of a knock or vigorous washing and drying of the skin</td>
<td>Control bleeding</td>
<td>Non adhesive silicone based dressing with foam secondary dressing. (It is important to avoid harsh adhesive dressings)</td>
</tr>
<tr>
<td>Cleanse wound with saline to remove any debris present.</td>
<td>Light retention bandage</td>
<td></td>
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<tr>
<td>If possible and the flap is viable gently ease the skin flap back in to place</td>
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<td></td>
</tr>
<tr>
<td>Encourage moist wound healing environment</td>
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</tbody>
</table>

Infected Wounds

Before commencing any topical or systemic therapy, swabs should be taken for culture and sensitivity.

Where wounds are only colonised or have superficial local infection present, topical antimicrobials may be used. Antibiotic therapy is generally not required or prescribed for wound colonisation alone, further advice should be sought concerning systemic therapy, from the Infection Control Team, if there is evidence of spreading cellulitis.

Antiseptic dressings, for example, those impregnated with silver or iodine may be helpful for wounds infected or heavily colonised with MRSA (White et al, 2001) and their use should be considered if appropriate for the wound type. Superficial MRSA wound colonisation may occur without undue complications or delayed wound healing.
Antibiotic Applications to Wounds

Antibiotic applications should be avoided, since they can lead to the emergence of resistant organisms and cause sensitisation. In particular, agents that are also used systemically (e.g. gentamicin, fusidic acid) should only be used on the authority of a Microbiologist or Dermatologist.

Infected Wounds

<table>
<thead>
<tr>
<th>Type</th>
<th>Indicator/Descriptor</th>
<th>Management Aims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colonised</td>
<td>Multiplications of organisms with, as yet, no host reaction Positive swab/biopsy</td>
<td>Prevent Infection Reduce bacterial numbers Prevent bacterial proliferation</td>
</tr>
<tr>
<td>Critically Colonised</td>
<td>Sufficient organisms present to interfere with healing but not invading surrounding tissue, therefore no inflammation</td>
<td>Reduce bacterial numbers Prevent bacterial infection Remove barriers to healing</td>
</tr>
<tr>
<td>Clinically Infected</td>
<td>Deposition and multiplication of bacteria with host reaction</td>
<td>Resolve deep infection using systemic antibiotics Reduce bacterial numbers Treat symptoms Prevent septicaemia Remove Barriers to healing</td>
</tr>
</tbody>
</table>

**Characteristics:**

- Pain, excess exudate, Dull, dark red granulation tissue, wound is static and delayed healing
- Characteristics of infection: Pain, Erythema, Inflammation, Pyrexia, Pus, Odour, Heavy exudate, Non-healing

**Infected Wounds**
In cases of clinical infection, systemic antibiotics must be used when assessing a wound, check for signs of a spreading infection:

- Pyrexia
- Localised heat and swelling around the wound margins
- Pain
- Friable wound bed, pus, green slough and offensive odour may be present

Please refer to the Infection Control protocols on the Walton Centre Intranet

**Burns**

**Classification of Burns**

Burns are classified as first-, second-, or third-degree, depending on how deep and severe they penetrate the skin's surface.

**First-Degree (Superficial) Burns**

First-degree burns affect only the epidermis, or outer layer of skin. The burn site is red, painful, dry, and with no blisters. Mild sunburn is an example. Long-term tissue damage is rare and usually consists of an increase or decrease in the skin colour. Symptoms may include:

- redness
- dry skin
- skin that is painful to touch
- pain usually lasts 48 to 72 hours and then subsides
- peeling skin

**Second-Degree (Partial Thickness) Burns**

Second-degree burns involve the epidermis and part of the dermis layer of skin. The burn site appears red, blistered, and may be swollen and painful. Symptoms may include:

- blisters
- deep redness
- burned area may appear wet and shiny
- skin that is painful to the touch
- burn may be white or discoloured in an irregular pattern
Third-Degree (Full Thickness) Burns

Third-degree burns destroy the epidermis and dermis. Third-degree burns may also damage the underlying bones, muscles, and tendons. The burn site appears white or charred. There is no sensation in the area since the nerve endings are destroyed. Symptoms may include:

- dry and leathery skin
- black, white, brown, or yellow skin
- swelling
- lack of pain because nerve endings have been destroyed

Burns require specialist input, a copy of the Northern Burn Care Network protocol is included on the Tissue viability/Infection Control website for information, however always refer to the Tissue Viability Nurse.

Pressure Ulcers

Common Definition of Pressure Ulcers

A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear. A number of contributing or confounding factors are also associated with pressure ulcers (EPUAP 2009).

Assess the risk for new pressure ulcer development using a structured, consistent approach which includes a validated risk assessment tool and a comprehensive skin assessment, refined by using clinical judgment.

Spinal-Cord-Injured Individuals

Ideally, Ischial ulcers should heal in an environment where the ulcers are free of pressure and other mechanical stress. Total bed-rest may be prescribed to create a pressure-free wound environment. However, this approach comes with potential physical complications (e.g., muscle wasting, deconditioning, respiratory complications), psychological harm, social isolation, and financial challenges for the individual and his/her family. Balancing physical, social, and psychological needs against the need for total offloading (i.e., total bed-rest) creates a challenging dilemma for the individual and the professional. Use of a wheelchair is imperative for spinal-cord-injured individuals. Sitting time may need to be restricted when ulcers are present on sitting surfaces. Seating cushions must be high-immersion, uniform-loading distribution cushions. Refer to the Consortium on Spinal Cord Injury Medicine guidelines for additional information (EPUAP 2009).

Bariatric Patients

Pressure ulcers may develop in unique locations, such as beneath folds of skin and in locations where tubes and other devices have been compressed between skin folds. Pressure ulcers develop over bony prominences, but may also result from tissue pressure across the buttocks and other areas of high adipose tissue concentration (EPUAP 2009).

Refer to ‘Pressure Ulcer Guidelines – The Prevention and Management’ on the Walton Centre intranet.
<table>
<thead>
<tr>
<th>Grade 1</th>
<th>Intact skin with non-blanchable erythema of a localized area usually over a bony prominence. Discoloration of the skin, warmth, oedema, hardness or pain may also be present. Darkly pigmented skin may not have visible blanching.</th>
<th>Ensure pressure removed from the area. Monitor</th>
<th>Apply skin protection barriers as needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 2</td>
<td>Partial thickness loss of dermis presenting as a shallow open ulcer with a red/pink wound bed, without slough. May also present as an intact or open/ruptured serum or sero-sanguineous-filled blister.</td>
<td>Ensure pressure removed from area</td>
<td>Hydrocolloid or dry dressing</td>
</tr>
<tr>
<td>Grade 3</td>
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<tr>
<td></td>
<td>Grade 3</td>
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<td>Grade 3</td>
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<td></td>
</tr>
<tr>
<td>Grade 4</td>
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</tbody>
</table>

**Grade 3**

- Full thickness skin loss. Subcutaneous fat may be visible but bone, tendon or muscles are *not* exposed.
- Some slough may be present.
- May include undermining and tunnelling.

Pressure to keep off the area at all times.
- Loosely fill the cavity with hydro-fibre/alginate dressing to promote granulation and aid autolytic debridement if wound sloughy.
- Foam dressing to secure.
- VAC therapy (TVN advice only).

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**Grade 4**

- Full thickness tissue loss with exposed bone, tendon or muscle.
- Slough or eschar may be present.
- *Often* includes undermining and tunnelling.

Pressure to be kept off area at all times.
- Loosely fill the cavity with hydro-fibre/alginate dressing to promote granulation and aid autolytic debridement if wound sloughy.
- Foam dressing to secure.
- VAC therapy (TVN advice only).
<table>
<thead>
<tr>
<th>Potential Dead Tissue Injury</th>
<th>Purple or maroon localized area of discoloured intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear.</th>
<th>Ensure pressure kept off the area at all times. Protect and monitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Un-gradeable Depth unknown (term used in USA)</td>
<td>Full thickness tissue loss in which actual depth of the ulcer is completely obscured by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed. Until enough slough and/or eschar are removed to expose the base of the wound, the true depth cannot be determined; but it will be either a Category/Stage III or IV.</td>
<td>Ensure pressure kept off the area at all times. Monitor and grade at earliest opportunity</td>
</tr>
</tbody>
</table>
Leg Ulcers

A leg ulcer is a long-lasting (chronic) wound on the lower leg or foot that takes more than six weeks to heal.

The symptoms of a venous leg ulcer include pain, itching and swelling in the affected leg. There may also be other signs, such as discoloured or hardened skin around the ulcer. A venous leg ulcer is the most common type of leg ulcer, accounting for 80-85% of all cases. Venous leg ulcers develop when persistently high blood pressure in the veins of the legs (venous hypertension) causes damage to the skin, which eventually breaks down and forms an ulcer.

Other common types of leg ulcer include:

- arterial leg ulcers – caused by poor blood circulation in the arteries
- diabetic leg ulcers – caused by the high blood sugar associated with diabetes
- vasculitic leg ulcers – associated with chronic inflammatory disorders such as rheumatoid arthritis and lupus
- traumatic leg ulcers – caused by injury to the leg
- malignant leg ulcers – arising from a tumour of the skin of the leg

Leg ulcers should be assessed by a suitably qualified professional with experience in leg ulcer management, as the treatment of these requires additional training.

Refer to Tissue Viability for advice and support ext 5599 or bleep 5437

Surgical Wounds

Surgical and acute wound management focuses on restoration of function and physical integrity with the minimum deformity and without infection. A holistic approach to assessment and management of surgical and acute wounds is essential.

Classifications of Surgical Wounds

- **Clean**: an incision in which no inflammation is encountered in a surgical procedure, without a break in sterile technique, and during which the respiratory tract, alimentary or genitourinary tracts are not entered.

- **Clean-contaminated**: an incision through which the respiratory, alimentary, or genitourinary tract is entered under controlled conditions but with no contamination encountered.

- **Contaminated**: an incision undertaken during an operation in which there is a major break, in sterile technique or gross spillage from the gastrointestinal tract, or an incision in which acute, non-purulent inflammation is encountered. Open traumatic wounds that are more than 12–24 hours old also fall into this category.
- **Dirty or Infected**: an incision undertaken during an operation in which the viscera are perforated or when acute inflammation with pus is encountered (for example, emergency surgery for faecal peritonitis), and for traumatic wounds where treatment is delayed, there is faecal contamination, or devitalised tissue is present.

- **Debridement** The excision or wide removal of all dead (necrotic) and damaged tissue, that may develop in a surgical wound.

**Healing by Primary Intention**

Occurs when a wound has been sutured/stapled after an operation and heals to leave a minimal, cosmetically acceptable scar.

**Healing by Secondary Intention**

Occurs when a wound is deliberately left open at the end of an operation. Heals by contraction, granulation and epithelialisation. The healing duration will depend on the amount of tissue that must be replaced. The resulting scar may be quite extensive.
Delayed Primary (Tertiary) Intention
The wound is kept open to allow for drainage of exudate, and control of contamination. At a later date the wound is surgically closed (usually within 7 days).

Changing Dressings
Use an aseptic non-touch technique for changing or removing surgical wound dressings. Use an appropriate interactive dressing to manage surgical wounds healing by secondary intention.

Refer to a tissue viability nurse (or another healthcare professional with tissue viability expertise) for advice on appropriate dressings for the management of surgical wounds that are healing by secondary intention.

Postoperative Cleansing
Use sterile saline for wound cleansing up to 48 hours after surgery if indicated. Advise patients that they may shower safely 48 hours after surgery.

Complications of Surgical Wounds
Surgical site (wound) infection This occurs when pathogenic organisms multiply in a surgical wound giving rise to local signs and symptoms, for example, heat, redness, pain and swelling, and (in more serious cases) with systemic signs of fever or a raised white blood cell count.

Infection in the surgical wound may prevent healing taking place so that the wound edges separate or it may cause an abscess to form in the deeper tissues.
Hematoma

Hematoma after surgery or postoperative hematoma is basically a localized collection of blood at the surgery site. It is defined as the collection or pooling of blood under the skin, in body tissues or an organ. Hematoma may develop a few hours (or even days) after the surgery, due to some kind of damage to the surrounding blood vessels during the surgery. Often mild cases of hematoma get reabsorbed, and do not require surgical intervention. If this is not the case then surgical intervention may be required.

Dehisced Wound

Wound opens
Sinus

A wound sinus is a discharging blind-ended track that extends from the surface of an organ (the skin) to an underlying abscess or cavity. The track is usually lined with granulation tissue. (Butcher, 1999)

A thorough examination of the wound is essential to observe the condition of the surrounding tissue for signs of maceration, excoriation and cellulitis. The nature of the exudate, its volume, colour and consistency should also be noted. The management of a sinus will depend on its underlying aetiology, ie infection, liquefaction (natural breakdown of dead tissue) or foreign body.

Refer these wounds to tissue viability nurse for assessment and treatment plan.
PRODUCTS AVAILABLE FOR USE WITHIN THE WALTON CENTRE

Charcoal Clinisorb®, Carboflex®
Hydrocolloid Duoderm® Extra thin
Hydrofibre Aquacel®, Aquacel® AG
Hydrogel Aquaform®, Intrasite®
**Honey Medihoney Activon®, Algivon®
Paraffin Tulle
Polyurethane Foam 3M Foam
Iodine Inadine®, Iodoflex®
Silicon Non Adherent Silflex®
Barrier Film Cavilon® Cream, Spray, Stick
Protease Modulating Dressings Promogram®
Honey – see intranet
**Maggots (TVN assessment only)

** These products are ordered via tissue viability nurse, not from Pharmacy.

HYDROCOLLOIDS (Duoderm Extra Thin)

Consists of a foam sheet that is covered with hydrophilic particles. In contact with wound exudate these particles swell forming a gel which promotes wound healing. They hydrate necrotic/sloughy tissue encouraging autolysis,

1. Minimum 2cm overlap (3cm is recommended) - Do not use on fragile skin.
2. Warm the dressing with hands and mould to the wound to ensure that adhesive sticks to the skin.
3. Leave on for 4-5 days; maximum 7 days. This is important: wound will not heal if dressing is changed too frequently.
4. **Note:** wound may look worse on removal of dressing - this is part of the healing process and can be due to the presence of exudate which should be removed using warm saline.
5. Different sites require different types of i.e. Extra Thin, should be used on awkward areas such as heels and sacrum and on superficial wounds with minimal exudate.
6. An expensive dressing if used inappropriately.
7. Do not use if anaerobic infection is present.

NB Not to be used on heavily exuding wounds, caution with diabetic patients.
HYDRO FIBRE (Aquacel®, Aquacel® AG)

Interlocking weave of Hydrocolloid fibres (sodium carboxymethylcellulose) allowing the absorption of excess exudate. Retains fluid within its structure and reduces the risk of maceration and excoriation.

AG (silver) – impregnated useful for infected or malodorous wounds.

1. Cut Aquacel sheet to shape to allow a 1cm overlap.
2. Do not moisten prior to application or combine with any other primary dressing, e.g. Inadine or Intrasite gel.
3. Cover with a moisture retaining secondary dressing.
4. Infected wounds should be changed daily.
5. Can be used on heavily exuding wounds.
6. Ribbon dressing to be used to loosely fill cavity wounds

NB: Do not use on dry wounds

Size - 5cm x 5cm, 10cm x 10cm, 15cm x 15cm, 2cm x 45cm. (“ribbon”)

HONEY (Actilite® Algivon®)

Actilite - is an antibacterial non adherent primary dressing impregnated with manuka Honey and Manuka Oil. Depending on exudate levels from wound can be left in place up to 7 days.

Algivon – is an alginate dressing impregnated with honey that will help to maintain a moist wound healing environment, help reduce odour associated with malodorous wounds, absorb exudate and assist to de-slough and de-bride necrotic wounds.

1. Honey should not be used on patients who have an allergy to honey or honey products.
2. Place directly onto wound bed, can be cut to size, change the dressing when the colour changes significantly
3. Facilitate dressing removal by irrigating wound bed with normal saline.
4. Cover with secondary dressing

Size – 5cm x 5cm, 10cm x 10cm. Order via tissue viability nurse, not pharmacy

SILICON NON-ADHERENT DRESSING (Silflex®)

Silflex

Soft silicone wound contact layer, to be used under secondary dressing or with Vacuum Assisted Closure (VAC)
1. May be used on skin tears, abrasions, surgical wounds, burns, lacerations, pressure ulcers and leg ulcers
2. Not to be used on patients who have sensitivity to silicone

Size - 5x7cm, 8x10cm, 12x15cm, 20x30cm, 36x60cm

NO STING BARRIER FILMS – (Cavilon®)
A non sting protective transparent barrier film. Provides protection to the skin from bodily fluids including wound exudates, and also from tapes and dressings.

NB Should be applied every 3 days.
Size 1ml & 3ml “lollipops”, 28ml spray.

HYDROGEL (Aquaform ®)
Absorbs exudate and produces a moist environment at the surface of the wound promoting rapid debridement by rehydration and autolysis of dead tissue.
1. Apply a layer at least 5mm thick on wound only, as excess use on healthy skin will cause maceration.
2. Consider protecting surrounding skin with white soft paraffin. Choice of secondary dressing depends on amount of exudate produced.
3. The dressing may be left in place for up to 3 days or until strike through of exudate appears on the secondary dressing. Change dressing daily if infected.
4. Cleanse wound thoroughly with warm saline before re-applying.
5. The preservatives may be irritant for some patients: use cautiously.
6. Hydrogels interact with povidone-iodine and should not be used together. It should not be used with dressings such as Aquacel.
7. Do not use two of 8g size. Order 15g pack.

Size - 8g, 15g.

Flaminal Forte
Alginogel for use on medium to heavily exuding wounds. Consists of an antibacterial enzyme system embedded in hydrated alginates. It is indicated for moderately to heavily exuding wounds such as this helps;
1. Keep wounds moist and clean
2. Offers antimicrobial protection and can assist in reduction of wound odour caused by bacteria
3. Safe for skin and wound tissue
   Order via tissue viability nurse, not Pharmacy.
**Tegaderm Foam®** - adhesive dressings

Foam dressings are hydrophilic and have a non-adherent surface.

1. Use for moderately exudating wounds.
2. Can be used as primary or secondary dressing.
3. Should not be used as pressure relieving pad.

Size – 6.9 x 6.9, 6.9 x 7.6, 8.8cm x 8.8cm, 10cm x 11cm, 14.3cm x 14.3cm, 14.3cm x 15.6cm, 19cm x 22.2cm, 13.9cm x 13.9cm (heel)

**Biatain silicone®** foam dressings

These are to be used at recommendation of the Tissue Viability/Infection Control team for patients that have very fragile skin or allergy to adhesive on the Tegaderm foam. These are also to be used for head wounds were appropriate due to ease of removal.

Size - .5x7.5cms; 10x10cms; 12.5x12.5cms; 15x15cms; 17.5x17.5cms. Order via tissue viability nurse, not Pharmacy.

**CADEXOMER IODINE (Iodoflex® paste)**

1. Indicated for the treatment of sloughy, infected (including MRSA) wounds with moderate to high exudate.
2. A single application should not exceed 50g.
3. The total amount of Iodoflex used in one week must not exceed 150g.
4. Dressings should be changed approximately 3 times per week or when the Iodoflex has become saturated with wound exudate, indicated by a loss of colour.
5. Duration of treatment must not exceed one week.
6. Contraindicated in patients with known or suspected iodine sensitivity, Hashimoto’s thyroiditis and in patients with a past history of any thyroid disorder. Do not use if patient is pregnant or breast feeding.

Size - 6cm x 4cm, 8cm x 10cm, 8cm x 6cm. Order via tissue viability nurse, not Pharmacy.

**POVIDONE-IODINE (Inadine®)**

Inadine is a knitted viscose primary dressing impregnanted with 10% povidone-iodine.

1. Inadine should only be used for infected superficial wounds.
2. Cover with secondary dressing depending on amount of exudate.
3. Antibacterial activity of dressing lasts for 2 days.
4. Change dressing type after controlling infection as povidone iodine can slow healing.

5. Contraindicated in patients with known or suspected iodine sensitivity. Hashimoto's thyroiditis and in patients with past history of any thyroid disorder. Do not use if patient pregnant or breast feeding.

Size - 5cm x 5cm, 9.5cm x 9.5cm.

**Aderma dermal pads**

These are designed to help prevent pressure ulcers and should be used at the early signs of pressure damage.

1. To be used on intact skin only
2. Can be cut with scissors
3. Can be washed and reused for the same patient.

Order via tissue viability nurse, not Pharmacy

**V.A.C (KCI, vacuum assisted closure Tissue viability request)**

The integrated V.A.C. Therapy System promotes wound healing through Negative Pressure Wound Therapy (NPWT). Delivering negative pressure (a vacuum) at the wound site through a unique, proprietary dressing helps draw wound edges together, removes infectious materials and actively promotes formation of the granulation tissue.

This should not be used on grossly infected or bleeding wounds, malignancy, exposed vessels or organs, unexplored fistulae, extensive necrotic tissue or non-concordant patients. (There is a separate assessment form for the use of VAC therapy).

**Larvea (Tissue Viability request)**

Larval Therapy, also known as 'Maggot Therapy' involves the use of larvae of the greenbottle fly, which are introduced into a wound to remove necrotic, sloughy and/or infected tissue. Larvae can also be used to maintain a clean wound after debridement if a particular wound is considered prone to re-sloughing. Larvae can in some cases cleanse wounds much more rapidly than conventional dressings and can improve the condition of a wound allowing the process of healing to begin.

**CAPILLARY ACTION DRESSING**

Three layer dressing of polyester/cotton fibres pull interstitial fluid from the wound surface to a central layer.

1. Must only be used after review by the wound care team.
2. Useful for highly exudating wounds.
3. Duration for dressing change to be specified by wound care team.
4. Do not use on heavily bleeding wound or if bone or tendons are exposed.

**Bandages**

**K-Soft** is a soft-absorbent sub compression bandage. It is also available as a longer size for longer legs. They help to:

1. Absorb exudate
2. Redistributes pressure to help prevent damage to bony prominences
3. Helps to shape the leg
4. Soft and comfortable
5. Very comfortable
6. Extra resilience and cushioning

Size - 10cm x 3.5cm, 10cm x 4.5cm (for longer leg)

**K-Lite** is a type 2 support bandage. It is also available as a longer size for longer legs. Acts as a base for compression is comfortable and comfortable. Can be used for the treatment of Venous Leg Ulcers (2nd layer of K-Four multilayer bandage system), light support for sprains and strains and can be used for retention bandaging.

Size - 5cm x 4.5m, 7cm x 4.5m, 10cm x 4.5m, 15cm x 4.5cm, 10cm x 5.25cm (for longer leg). Order via tissue viability nurse, not via Pharmacy.

**Mild and moderate corticosteroid preparations** - are associated with few side effects but still need to be used with care. Topical corticosteroids should be applied no more frequently than twice daily, once daily is often sufficient, occlusion will increase the potency. Application of steroid preparations can be measured in fingertip units with 1 fingertip unit enough to cover an area that is twice the size of the flat adult palm, a single daily application should continue for no more than 2 weeks.

Available in 30g tubes

Trimovate - Mild corticosteroid preparation with additional nystatin. This is sometimes unavailable, in which case Terracortril is the usual alternative.

Timodene - Moderate corticosteroid preparation with additional nystatin and oxytetracycline

**References**

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