Section 10: Wound Complications - Fistulae/Sinuses/Cavities

As with all complex wounds a full assessment to determine the cause and extent of the wound is essential. A fistula is an abnormal passage between a hollow organ and the skin surface, or between two hollow organs. A wound sinus is a discharging blind-ended tract that extends from the surface of an organ to an underlying area or abscess cavity. The cause of a sinus must always be determined by in-depth assessment. A cavity wound may be chronic or acute and falls into the categories described below.

<table>
<thead>
<tr>
<th>Type</th>
<th>Indicator/descriptor</th>
<th>Management aims</th>
<th>Treatment options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fistula</strong></td>
<td>Abnormal passage between two epithelialised surfaces that connect one viscera to another or to the body surface.</td>
<td>- Management and free drainage of exudate. - Protection of surrounding skin. - Prevention of infection. - Removal of necrosis or slough. - Promotion of granulation from the base of the wound.</td>
<td><strong>Hydrogel</strong>&lt;br&gt;Fill track if exudate is low (using a syringe) <strong>Alginate</strong> or <strong>Hydrofibre</strong>&lt;br&gt; if exudate is moderate to high. <strong>Secondary Dressing Foam or Soft Silicone Foam</strong></td>
</tr>
<tr>
<td><strong>Sinus</strong></td>
<td>Discharging, blind-ended track that extends from the surface of the skin to an underlying abscess/cavity. May be caused by infection, liquefaction or a foreign body.</td>
<td>- Allow cleansing and draining. - Do not plug. - Protection of surrounding skin. - Prevention of infection. - Removal of necrosis or slough. - Promotion of granulation from the base of the wound.</td>
<td><strong>Hydrogel</strong>&lt;br&gt;Fill track if exudate is low (using a syringe) <strong>Alginate</strong> or <strong>Hydrofibre</strong>&lt;br&gt;If exudate is moderate to high. <strong>Secondary Dressing Foam or Soft Silicone Foam</strong></td>
</tr>
<tr>
<td><strong>Cavity Grade 2</strong></td>
<td>A cavity wound may be acute or chronic. Surgical cavities are generally clean cavities with a healthy bed. Cavities can be present in a range of aetiologies (pilonidal sinus, pressure ulcers and leg ulcers are examples).</td>
<td>- Management and free drainage of exudate. - Protection of surrounding skin. - Prevention of infection. - Removal of necrosis or slough. - Promotion of granulation from the base of the wound.</td>
<td><strong>Hydrogel</strong>&lt;br&gt;Where there is tracking or undermining. <strong>Alginate</strong> or <strong>Hydrofibre</strong>&lt;br&gt;To fill cavity. <strong>Secondary Dressing Foam or Soft Silicone Foam</strong></td>
</tr>
<tr>
<td><strong>Grade 3</strong></td>
<td>Full-thickness skin defect with undermining and or necrosis. <strong>Secondary Dressing</strong> can be used to reduce drainage while awaiting definitive surgical intervention.</td>
<td>- Management and free drainage of exudate. - Protection of surrounding skin. - Prevention of infection. - Removal of necrosis or slough. - Promotion of granulation from the base of the wound.</td>
<td><strong>Secondary Dressing Foam or Soft Silicone Foam</strong></td>
</tr>
<tr>
<td><strong>Grade 4</strong></td>
<td>Full-thickness skin defect with tissue destruction and tissue necrosis extending to the underlying bone, tendon or joint capsule.</td>
<td>- Management and free drainage of exudate. - Protection of surrounding skin. - Prevention of infection. - Removal of necrosis or slough. - Promotion of granulation from the base of the wound.</td>
<td><strong>Secondary Dressing Foam or Soft Silicone Foam</strong></td>
</tr>
</tbody>
</table>
**Other considerations**

The amount of packing inserted into the wound should be documented to ensure it is all removed at the next dressing change.

Rope should be inserted very loosely as a wick to facilitate drainage and not cause a back flow of exudate into the body cavity. A 2cm tail should be left outwith the wound to enable easy removal. Wounds should not be overfilled.

Fistula: Examination of the fluid will indicate the source of the fistula, e.g. bile stained: from biliary tract, brown faecal fluid: from large bowel. Measurement of volume of exudate may be appropriate using a collection device e.g. stoma bag.

Sinus: Often end in an abscess/cavity which contains foreign material. This needs to be removed and healing promoted or the sinus is likely to become chronic.

Patient Assessment:
- Establish the site and extent of tissue damage
- Consider CAVILON® to prevent maceration from exudate
- Nutrition
- Pain management
- Surgical intervention
- Multi-disciplinary approach

If wound infection is suspected refer to Wound Infection section of formulary.

**References:**