**Incision Management: Risk Assessment**

**Step 1: Risk Factor Identifier**

<table>
<thead>
<tr>
<th>Procedural risk</th>
<th>No evidence of increased risk of post-operative wound healing complications</th>
<th>Significantly increases the risk of post-operative wound healing complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the procedure elective?</td>
<td>Yes</td>
<td>Emergency¹,²</td>
</tr>
<tr>
<td>2. Is the procedure clean?</td>
<td>No</td>
<td>Clean contaminated¹,²,³,⁴</td>
</tr>
</tbody>
</table>

| Patient related risk             |                                                                               |                                      |
|----------------------------------|                                                                               |                                      |
| 1. Patient aged 70 or older?     | No                                                                           | COPD¹,⁴,⁵,⁶                                                                               |
| 2. Underlying medical condition? | No                                                                           | Anaemia¹,⁴,⁵                                                                               |
| 3. Sepsis?                       | No                                                                           | Hyperglycmia⁶⁺                                                                         |
| 4. Smoking?                      | No                                                                           | Diabetes²,⁶⁺                                                                         |
| 5. Malnutrition?                 | No                                                                           | Jaundice⁷⁺                                                                         |
| 6. Adjunctive therapies?         | No                                                                           | Cancer⁸⁺                                                                          |
| 7. Obesity?                      | Yes                                                                          | Alcoholism⁹⁺                                                                         |
|                                  | BMI <35                                                                       | Low serum albumen¹⁷                                                                  |

| Surgical considerations          |                                                                               |                                      |
|----------------------------------|                                                                               |                                      |
| 1. Skin prep as per NICE guidelines? | Yes                                                                          | Yes¹⁺,⁴⁺                                                                         |
| 2. Procedure involves prosthesis? | No                                                                           | Yes²⁺                                                                                 |
| 3. Procedure involves limb amputation? | No                                                                          | Yes⁹⁺                                                                                 |
| 4. Prophylactic antibiotics?     | Yes                                                                          | No¹⁰⁺                                                                                 |
| 5. Location/type of the surgery  | Other                                                                        | Bile duct¹⁺                                                                         |
|                                  |                                                                               | Liver¹⁺                                                                           |
|                                  |                                                                               | Pancreas¹⁺                                                                         |
|                                  |                                                                               | Gastric¹⁺                                                                           |
|                                  |                                                                               | Vascular¹⁺                                                                         |
|                                  |                                                                               | Bowel¹⁺                                                                           |

| Peri-operative risk              |                                                                               |                                      |
|----------------------------------|                                                                               |                                      |
| 1. Hypothermia?                  | No                                                                           | Yes¹⁺                                                                                 |
| 2. Hypoxia?                      | No                                                                           | Yes°                                                                                 |

**Step 2: Risk Grading Scheme⁰¹ - Based on the number of risk factors identified allocate a risk status to the patient**

1. **Grade 1**
   - No Risk
   - Healthy patient
   - Low risk procedure

2. **Grade 2**
   - Single risk factor

3. **Grade 3**
   - Multiple risk factors

**Step 3**

Consult the "Incision Management Guide" for risk-based recommendations on appropriate dressing selection.
**Step 3: Incision Management Guide**

**Conventional Dressing Regimen**

- **Appropriate dressing (IPSITE Post-Op / Post-Op Visible)**
  - In line with local incision management protocol/guidelines

**INITIAL REVIEW - 72 HOURS**

Examine dressing for exudate strike-through to determine whether dressing change is required:

- **Dressing can be left in-situ if appropriate**
- **Blocking-port = change**
- **Dressing needs to be changed**

- **Assess wound progress**
- **Ensure PICO continues to be suitable for the patient**
- **Ensure PICO continues to be appropriate for the achievement of wound closure**

**Discontinue PICO if**

- **Wound closure is achieved**
- **There is excessive bleeding from the wound**
- **PICO has proven to be unsuitable**
- **Patient has had an adverse reaction**
- **Any of the contraindications for PICO are applicable**

**REVIEW - 7 DAYS**

Assess wound’s progression towards closure:

- **Closure not achieved…**

- **Re-assess wound**
  - **Re-assess patient**
  - **Consult local protocol for guidance**

- **Wound closure achieved…**
  - **Exudate levels are minimal**
  - **PICO Pathway**

**PICO considerations for use**

- **Patient suitability?**
  - **Is PICO a suitable treatment for the patient being considered?**
  - **Will the patient be concordant with the therapy?**
  - **Will the patient remove and/or interfere with the dressing and/or device?**
  - **Will the patient be concordant with the therapy?**

**Wound site**

- **Is the wound location suitable for treatment with PICO?**
  - **Avoid sites with pins and/or external fixation.**
  - **Does the port need to be located in an area which will minimise the risk of pressure damage?**
  - **Consider routing of tubing to avoid risks of pressure damage and entanglement**
  - **Consider proximity of stoma sites**

**PICO contraindications**

Do not use PICO if any of the contraindications for PICO use are applicable. PICO is contraindicated for:

- Patients with malignancy in the wound bed or margins of the wound (except for palliative care to enhance quality of life)
- Previously confirmed and untreated osteomyelitis
- Non-sterile and unexplored fistulas
- Necrotic tissue with eschar present
- Exposed arteries, veins, blood vessels, nerves or organs
- Anastomotic sites
- Emergency airway aspiration
- Pleural, mediastinal or chest tube drainage
- Surgical suction

**References**