# Pathway for Breast Surgical Wounds

## Factors associated with increased risk of wound infection

- Poorly controlled diabetes
- Prior surgery
- Radiation therapy or chemotherapy
- Conditions associated with hypoxia and/or poor tissue perfusion (e.g. anaemia, cardiac or respiratory disease, arterial or vascular disease, renal impairment, rheumatoid arthritis, shock)
- Immune system disorders (e.g. acquired immune deficiency syndrome, malignancy)
- Inappropriate antibiotic prophylaxis, particularly in acute wounding
- Protein-energy malnutrition
- Alcohol, smoking and drug abuse (IWII 2016).

**NB:**

- **An aseptic non - touch technique should be used for changing and or removing a surgical wound dressing.**
- **Ensure the patients pain is monitored at each dressing intervention and offer appropriate.**

**Step 1: Patient Risk Assessment** Establish the patients Surgical Site Infection (SSI) risk factors.

| Low Risk | Medium Risk | High Risk |
|---|---|---|
| BMI ≤30 with no risk factors | BMI ≤40 with increased risk factors | BMI ≥40 with increased risk factors |

**Step 2: Wound Assessment** Identify if the wound is healing by primary or secondary intention and conduct a holistic assessment of the patient to establish the dressing options as per the local formulary.

| Primary Intention | | | Secondary Intention |
|---|---|---|---|
| **Low Risk**<br>**Apply a Film and pad island dressing e.g Post Opsite Visible or Mepilex Border Post Op**<br>Do not remove the dressing for at least **48 hours** unless there is:<br>• a bleed<br>• excessive exudate<br>• a haematoma. | **Medium Risk**<br>**Apply a Film and pad island dressing e.g Post Opsite Visible or Mepilex Border Post Op**<br>Do not remove the dressing for at least **14 days** unless there is:<br>• a bleed<br>• excessive exudate<br>• a haematoma. | **High Risk**<br>**Apply PICO single use NPWT following wound closure in theatre.**<br>• Once applied as per instructions for use, ensure the device is operating correctly<br>• Monitor the dressing for the amount of "staining", leave in place until the staining has reached the port or for **up to 7 or 14 days** depending on the products (PIC07/PIC014), or whichever is sooner. | • Undertake wound cleansing in accordance with the Wound Cleansing Policy and consider using Prontosan Debridement pad to support soft mechanical debridement.<br>• Use an appropriate interactive dressing following the relevant formulary pathway (in accordance with the predominate tissue type within the wound bed). |
| • Use sterile saline for wound cleansing as required up to 48 hours after surgery.<br>• Patient may have a "light shower" whilst the dressing is insitu. | | | |

**Step 3:** Document the holistic wound assessment using the relevant documentation and report accordingly.

## Step 4: Review, reassess and onward referral

- All patients should be monitored for signs of Surgical Site Infection (SSI) and signs of sepsis until full wound closure.
- Should a SSI be suspected by the presence of cellulitis, either by a new infection or an infection caused by treatment failure
- Obtain relevant samples for culture and sensitivity testing
- Consult the senior clinician involved in the patient's care for regrading antibiotic advice.

## Step 5: Patient information and discharge planning

- If a digital image has been captured this should be uploaded to the patient's clinical record and shared with the health care provider responsible for the ongoing care.
- Patients should be given the relevant written information which should include information regarding the:
  - Signs of infection
  - Hygiene (including hand hygiene)
  - Onward healthcare management
  - Who to contact should they have any concerns regarding their wound or its management.

**Signs of Clinical Infection**

- **Erythema, swelling, localised pain or tenderness**
- **Temperature above 38oC**
- **Increased exudate levels**
- **Increased heat at the wound site**
- **Odour**
- **Positive organism.**

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.

Other specialist dressings may be used as instructed by the surgeon/Consultant for areas that can not be dressed with an adhesive dressing e.g. nipple, vulva and perineum.

**References:** International Wound Infection Institute (IWII) (2016) Wound infection in clinical practice. Wounds International.
NICE (2021) Leukomed Sorbact for preventing surgical site infection Medical technologies guidance.
National Wound Care Strategy Program (2021) Surgical Wounds recommendations .
NICE (2019) PICO negative pressure wound dressings for closed surgical incisions Medical technologies guidance.
Wounds UK (2020) Best Practice Statement: Post -operative wound care - reducing the risk of surgical site infection
WUWHS (2018) Consensus Document. Surgical Wound Dehiscence improving prevention and outcomes.
Developed by the Skin Integrity Team February 2021. Updated December 2022. Review June 2024.