

Pathway for Orthopaedic Hip and Spinal Surgical Wounds

Factors associated with increased risk of wound infection

- Poorly controlled diabetes
- Previous 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 wound
- 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 patient's pain is monitored at each dressing intervention and offer appropriate analgesia.

Step 1: Patient Risk Assessment Presence of one or more of the risk factors outlined below. (Please tick all that are applicable).

Low Risk	At Risk			
	Spinal surgery	Fractured Neck of Femur	Revision Total Hip Replacement	Primary Total Hip
No Risk Factors Identify	<ul style="list-style-type: none"> • Diabetes • BMI ≥ 35 • ASA ≥ 3 	<ul style="list-style-type: none"> • BMI ≥ 35 • Pre operative medication of either DOAC's/warfarin or steroids • Diabetes • Immunosuppressed (incl rheumatoid arthritis). 	<ul style="list-style-type: none"> • Revision 	<ul style="list-style-type: none"> • Diabetes • BMI ≥ 35 • ASA ≥ 3
Disclaimer: The treatment plan for Revision Total Hip Replacement or Primary Total Hip Surgery may differ from this pathway based on surgeon discretion regarding individual patients.				

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 Apply Opsite post op visible dressing Do not remove prior to the consultants recommended date unless there is: <ul style="list-style-type: none"> • a bleed • excessive exudate • a haematoma. 	At Risk Apply PICO single use NPWT following wound closure in theatre. <ul style="list-style-type: none"> • Once applied as per instructions for use, ensure the device is operating correctly. • 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 consultant instructions. 	<ul style="list-style-type: none"> • Undertake wound cleansing in accordance with the Wound Cleansing Policy and consider using Prontosan Debridement pad to support soft mechanical debridement. • Use an appropriate interactive dressing following the relevant formulary pathway (in accordance with the predominate tissue type within the wound bed).
Please note: PICO 7 can remain in place for up to 7 days. PICO 14 can remain in place for up to 14 days. PICO should not be used without the pump being active.		

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

DBTH	RDASH	Primary Care
<ul style="list-style-type: none"> • Primary Closure Wound Management Care Sheet • Skin Integrity Wound Identification Care Sheet • Skin Integrity Wound Assessment and Care Plan • Report via the Skin Integrity Datix/Dashboard System. 	<ul style="list-style-type: none"> • Wound Care IPOC within SystmOne 	<ul style="list-style-type: none"> • SystmOne • EMISWeb

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.

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. Review June 2024