### SKIN AND SOFT TISSUE INFECTIONS Wound Infection

#### Step 1 – Antimicrobial wound care pathway

Complete holistic wound assessment to establish wound characteristics, underlying aetiology and factors which could delay healing.



\* Self-harm definition: "Intentional acts of self-poisoning or self-injury irrespective of the type of motivation or degree of suicidal intent. Thus, it includes suicide attempts as well as acts where there is little or no suicidal intent is involved." (Hawton et al 2007)

Nottinghamshire Area Prescribing Committee

### Step 2 – Management of wounds with two or more signs of infection or any self-harm wound



**NOTE - Prophylactic** use of antimicrobial dressings is dependent on the cause of the wound, or the risk of infection i.e. burns, bites, dirty traumatic wounds, patients who have reduced immunity, diabetes or poor arterial circulation, unsterile foreign bodies causing trauma. If any of these become clinically infected, despite local treatment then follow the pathway. Diabetic foot wounds should be referred to a specialist centre and closely monitored. Advice on severe burns should be sought from the Burns Unit (<u>NUH</u>).

The Tissue Viability Team should be contacted for advice or referral at any stage during this process. This is essential if prolonged antimicrobial treatments are being applied.

### INFECTED WOUNDS SHOULD BE RE-ASSESSED CONTINUOUSLY TO DETERMINE THE EFFECTIVENESS OF THE MANAGEMENT PLAN

### **Organisms**

- Commonly *Staphylococcus aureus* (MRSA is a possibility particularly in those patients who are elderly, have multiple conditions, reside in long term care institutions, have a previous history of MRSA or who have long term medical devices such as catheters, see MRSA <u>guideline</u>) and Streptococcus e.g. Group G or Group A Streptococcus. Other organisms may be found following animal or human bites, see local <u>guideline</u>. Also see diabetic foot <u>guideline</u>.
- Anaerobes if an abdominal wound.

### Self-harm wounds (notes):

- Self-harm wounds that are not contaminated with soil or faeces do not usually require oral antibiotics.
- If there are clinical signs of infection, a wound swab is required to identify any skin and soft tissue pathogens e.g. *Staphylococcus aureus* or Streptococci.
- Ensure all patients are in date with tetanus vaccination.

#### Part of the Antimicrobial Prescribing Guidelines for Primary Care.

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# Surgical wounds:

- Culture all infected surgical wounds and give dates of the operation on the laboratory request form and review empirical treatment with culture results.
- Local drainage and toilet may be sufficient in many cases.
- If post-operative treat with antibiotics according to swab results.
- If ongoing concerns about a surgical wound, patient will likely need a formal review by the clinical team who performed the surgery to ensure no deep source or collection is present.

## **Table 1: Antibiotic options**

| Antibiotic <sup>1</sup>   | Dose  | Duration |
|---|---|----------|
| Flucloxacillin (not if <u>MRSA</u> )  | Child 1 month–23 months: 62.5–125 mg four times a day         | 5-7 days |
|   | Child 2–9 years: 125–250 mg four times a day                  |          |
|   | Child 10–17 years: 250–500 mg four times a day                |          |
|   | Adult: 500 mg four times a day                                |          |
| In penicillin allergy:  |   |          |
| Clarithromycin <sup>2</sup>   | Adult: 500mg twice a day                                      | 5 days   |
| Or  |   |          |
| Doxycycline <sup>3</sup>  | Adult: 200mg first day then 100mg once a day                  | 5 days   |
| If anaerobes are isolated or  | Child 1 month: 7.5 mg/kg twice a day                          | 7 days   |
| likely due to site of infection   | Child 2 months-11 years: 7.5 mg/kg three times a day          |          |
| (abdominal/perineal) add in   | (max. 400mg per dose)   |          |
| Metronidazole   | Child 12–17 years: 400 mg three times a day                   |          |
|   | Adult: 400 mg three times a day                               |          |
| Alternatives if metronidazole   |   |          |
| contraindicated:  |   |          |
| In non-penicillin allergy   | Child 1–11 months: 0.25 mL/kg of 125mg/31 suspension          | 5-7 days |
| Co-amoxiclav  | three times a day.  |          |
|   | Child 1–5 years: 5 mL of 125/31 suspension three times a      |          |
|   | day.  |          |
|   | Child 6–11 years: 5 mL of 250/62 suspension three times a     |          |
|   | day.  |          |
|   | Child 12–17 years: 625mg three times a day                    |          |
|   | Adult: 625 mg three times a day                               |          |
| In penicillin allergy:  | <b>Neonate up to 14 days:</b> 3–6 mg/kg three times a day     |          |
| Clindamycin   | <b>Neonate 14 days to 28 days:</b> 3–6 mg/kg four times a day | 7 days   |
|   | Child: 3–6 mg/kg four times a day (max. per dose 450 mg)      | ,        |
|   | Adult:150–300 mg four times a day; increase as necessary      |          |
|   | to 450 mg four times a day                                    |          |
| <sup>1</sup> See <u>BNF</u> and <u>BNFC</u> for appropriate use and dosing in specific populations, e.g., hepatic, or renal impairment, pregnancy, breastfeeding. |   |          |

<sup>2</sup> Withhold statins whilst on clarithromycin course.
<sup>3</sup> Doxycycline is not suitable for pregnant women or children