

Wound Swabs

Guidelines for collection and Interpretation

Background

Skin and soft tissue infections are mainly caused by beta haemolytic streptococci (Lancefield groups A (also called *Streptococcus pyogenes*), B (also called *Streptococcus agalactiae*), C, D (rarely) and F) and *Staphylococcus aureus*. Isolation of these organisms from a wound does not necessarily imply that the wound is infected. **Clinical assessment is required** to make a diagnosis of wound infection or cellulitis.

Although other organisms such as coliforms and pseudomonas are not important causes of skin and soft tissue infections, they may be important in some circumstances. This will depend on patient profile and site of the wound/cellulitis.

It is therefore crucial that appropriate information is put on a request form.

Furthermore, the laboratory uses several techniques to isolate organisms and the targeting of predicted organisms in a sample depends on the profiling of a patient and site of infection as given on a request form. If this information is **wrong, missing or misleading**, the report produced by the laboratory is likely to be **erroneous and/or misleading** which may impact on patient safety.

Our audit of wound swabs in February 2015 showed that;

- 47% of swabs did not state the site of the wound.
- 32% had either no clinical details or had irrelevant details such as “chest infection”.

Required Information

- Patient and sender identifiers;
 - Will ensure report goes to the requestor of the test.
 - Will ensure report is attributed to the correct patient.
- Patient information;
 - Patient profile, e.g. diabetic, immunosuppressed.
 - Type of wound, e.g. post-operative, chronic ulcer, human or animal bite.
 - Site of wound, e.g. buttock, vulvar, toe.
 - State of wound, e.g. oozing pus, sinus, cellulitis.

- This will ensure that;
 - The laboratory will put up the right tests and use the appropriate techniques according to the clinical details to identify the organisms in a sample.
 - The laboratory will produce an appropriate report for the patient and the clinical condition.

Interpretation

- Staphylococcus aureus and beta haemolytic streptococci;
 - Likely significant, assess clinically to confirm significance.
- Coliforms e.g. E.coli and other Gram negative bacteria;
 - Likely insignificant and should be ignored in most circumstances. In some circumstances these might be significant such as infection involving the perineum/buttock or in diabetic feet. In bite wounds, Pasteurella might be identified. This is significant and must be treated.
 - Even in these special circumstances, clinical assessment is required before deeming such isolates as clinically significant.
- Pseudomonas
 - Likely insignificant. These are likely to be isolated in chronic wounds and in these clinical circumstances they can be safely ignored.
 - Occasionally they can be significant such as in traumatic wounds resulting from a piercing of a foot by a dirty nail.

Choice of antibiotics

The Area Prescribing Committee gives advice, in their Community Antibiotic Guidelines:

<http://www.coventrywarksapc.nhs.uk/mf.ashx?ID=a08aaed0-eb92-48e2-ac58-05ea6fcf41b8>

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