To Swab or not to Swab – that is the question?

Improvement Issues and Context

- 9% of health care associated infections (HCAI) are caused by wound infections.
- Within CWP there are 4 main Inpatient hospitals, accessing support from 3 local tissue viability services; information needs to be standardised across the trust to avoid confusion.
- There is an overall lack of knowledge and consensus regarding the recognition of localised and systemic wound infection.
- Wound infection is usually diagnosed on the patient’s presenting clinical signs and symptoms such as wound malodour, increased exudate and wound breakdown.
- Wounds may be colonised by normal skin flora without any adverse effect on healing. Wound swabs should be collected only when clinical criteria point to a wound infection.
- Wound swabbing is unanimously considered to be the most appropriate and the most cost effective method in determining wound infection, however, confusion surrounds the correct method for obtaining a wound swab.
- Staff have identified a training need in relation to wound assessment and dressing choice.
- Antibiotic therapy is often prescribed prophylactically regardless of if the patient presents as being systemically unwell or not. Development of resistance to antibiotics is an increasing problem.

Methods and Measurement

Development of a new post to provide an Infection Prevention and Control Nurse with tissue viability experience (IPC TVN) to support all inpatient areas across the CWP Trust to:

- Review referrals of all patients with wounds / pressure ulcers.
- Support staff to obtain wound assessment documentation, photographs, and advise with care planning.
- Review all dressing choice, microbiology results and antibiotic prescribing for wounds.
- Advise on the appropriate choice of wound dressings and antibiotics in line with CWP dressing and antimicrobial formulary.
- Liaises with CWP Viability service for advice regarding complex cases.
- Collects and reports data and trends to Infection Prevention and Control Sub Committee (IPCS&C) and Physical Health in Mental Health meetings.

In conjunction with the IPC team, the IPC TVN helps educate inpatient staff across the trust on:

- Aseptic Non Touch Technique .
- Antimicrobial Stewardship.
- Hand hygiene technique.
- Raising Sepsis awareness.
- Increase awareness of the ‘Chain of Infection’.

Evidence of Improvement

- Development of training guides to help inpatient staff assess wounds and recognise when it is necessary to take a wound swab.
- A standardised standard operational procedure (SOP) is being developed to ensure that swabs are collected using the ‘zig-zag’ swabbing technique.
- Development of a ‘1st dressing pack’ to signpost staff to use appropriate initial dressings, until advice and guidance from IPCTVN is obtained.

Colonisation

Wound healing should occur without the use of topical antimicrobial dressings.

Healing progressing normally

Critical Colonisation

Clinical signs and symptoms are increased pain, heat, swelling, odour and increased exudate.

Healing no longer progressing normally - Obtain swab

Local Infection

To include the presence of pus, heat, pain and swelling.

Wound appears unhealthy or deteriorating - Obtain swab

Systemic Infection

If untreated this may lead to sepsis. To prevent Sepsis:

- Vaccinate against the flu, pneumonia & any other infections that could lead to sepsis.
- Prevent infections that can lead to sepsis by:
  - Practicing good hand hygiene.
  - Cleaning scrapes, cuts & wounds.
- Observe for signs of infection such as fever, chills, rapid breathing & heart rate, confusion, mottled or discoloured skin and slurred speech.

NB: Sepsis can occur in response to ANY infection. Progression may lead to multi organ failure and even death.

References


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