

Retrospective Review of Surgical Site Infection Record Keeping in Bristol OMFS Unit

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Introduction

Monitoring of occurrence of surgical site infections (SSIs) is an important part of quality assurance as post-surgery infections can lead to readmissions, re-operations and worsened scarring. A SSI occurs often within 30 days of the operative procedure, or up to one year after if implants are part of the surgery ^(1,2).

Bristol Royal Infirmary record SSIs in a morbidity and mortality (M&M) record book and the Trust intranet workspace in free text, a task that is often the responsibility of dental core trainees (DCT).

Aim

Assess if the records of surgical site infections that occur at Bristol Royal Infirmary Oral and Maxillofacial Surgery (OMFS) Unit are being recorded, accurately and with sufficient detail.

Objectives

1. Compare the number of SSIs recorded in the M&M workspace/record book to those found through review of inpatient notes over a defined time period
2. Review the records of the SSIs for accuracy and detail

Methodology

1. Data collection from existing database

M&M workspace and record book reviewed between September to December 2019 for SSIs that met inclusion criteria.

2. Case note review

Retrospective analysis of electronic records of OMFS inpatients between September and December 2019

Inclusion Criteria

Within 30 days of surgery if no prosthesis or 1 year if prosthesis

AND

• Documented erythema, oedema, worsening pain > 3 days post-surgery

OR

• Additional antibiotics prescribed for clinician determined SSI

OR

• Positive wound swab surgical site

OR

• Return to theatre for incision and drainage/washout of surgical site +/- prosthesis removal

Exclusion Criteria

• Incomplete data

OR

• Post-operative infection not at surgical site or stitch abscess alone

OR

• Initial surgery due to infection

OR

• Delayed/non-healing related to cancerous tissue

OR

• Initial procedure by Oral Surgery team not OMFS

Inclusion/exclusion criteria adapted from CDC Definitions for SSI (1992) (Updated 2017 & 2021) ⁽³⁾

Results

	Standards Set	Target (%)	Results
1	<i>All SSIs should be recorded</i>	100	66%
2	<i>Record should include initial procedure, date of and diagnosis of SSI, management of SSI, including if readmission or re-operation needed, antibiotics prescribed, +/- bacterial cultures obtained ⁽⁴⁾.</i>	100	13%

Discussion

Potential barriers to recording SSIs could include:

- Insufficient knowledge of process or importance of recording SSIs, not a clear written policy
- Lack of time to prioritise this task for DCTs on call, reporting of SSIs inefficient (two methods of recording the same information – record book and workspace), ambiguous responsibility to task
- Lack of leadership and prompting for reporting of SSIs ⁽⁵⁾

Action Plan

- Reporting of SSIs in workspace only ✓
- Workspace to include headings/prompts for information to include (Adapted from Clavein-Dindo ⁽⁶⁾) ✓
- DCT teaching on SSIs including presentation at audit meeting ✓
- Process and importance of recording SSIs added to the DCT handbook as part of induction ✓

Conclusion

Reinforcing education on recording SSIs to the juniors was the main implementation of change, with senior support furthered through presentation of results. A second cycle will be conducted following resumption of usual service, related to COVID-19, plan is for June-August 2021.

References

1. Public Health England (2013). Protocol for Surveillance of SSI
2. Public Health England (2019). Surveillance of Surgical Site Infections in NHS Hospitals in England 2018-2019
3. National Healthcare Safety Network. Surgical Site Infection Event (2021).
4. NICE Quality Standard 49 – SSIs (2013)
5. Wilson, J. (2017) *J. Infect. Prev.*; 18(4):164-166
6. Dindo, D. et al.(2004) *Ann Surg*;240:205213