

Dorset County Hospital



NHS Foundation Trust

Clinical Audit Report

Project Title:

Infection rates following day case foot and ankle surgery – re-audit

Specialty/service:

Orthopaedic Surgery

Division:

Surgery

Audit Registration Number:

Audit Ref 2441

Project Team	Name	Grade	Contact Number
1.	Mr Nicolas Savva	Consultant	3171
2.	Mr Satish Ganesan	Specialty Doctor	Bleep 656
3.	Dr Oliver Howlett	F2	

Specialities Involved: Orthopaedic Surgery

Data Collection Period: Nov 2010-Dec 2011

Date Audit Submitted: 17/12/12

Audit Summary Sheet.

DATE PRESENTED	17/12/12
PRESENTED BY	Mr Satish Ganesan
PRESENTED AT (forum/group/meeting)	
AUDIT LEAD	Mr Nicholas Savva
KEY FINDINGS – these ideally should be presented as a table (see notes below)	Infection rates within acceptable limits Staph.aureus likely organism in surgical site infections
KEY CONCLUSIONS	Continue with current practice
KEY ACTIONS	None
HOW DOES THIS AUDIT IMPROVE PATIENT CARE?	Reassures team that patients continue to receive care at best standards
ESCALATION TO (if required)	--
RE-AUDIT DATE	--
REPORT DISTRIBUTION LIST	

Project title

Audit Ref 2441 - Infection rates following day case foot and ankle surgery – re-audit

Division/type of organisation

Orthopaedic Surgery

Specialities involved

Orthopaedic Surgery

Project lead

Mr Nicolas Savva

Other staff members involved

Mr Satish Ganesan

Dr Oliver Howlett

Background/rationale

Previous audit done in 2009-2012 reports acceptable rates of infection.

Re-audit to review current practice and confirm acceptable standards continue to be maintained.

Aim/ Objectives

Assess rates of infection following day case foot and ankle surgery

Standards/guidelines/evidence base

Literature - No universally accepted standards available

Sample

All

Audit type

Retrospective re-audit

Methodology – including data collection methods

- List of all patients undergoing day case foot and ankle surgery under care of lead consultant received from audit department.
- Microbiology reports of each individual patient reviewed
- Medical records of all patients who had wound swabs sent reviewed to assess true infection rates and to identify any factors that may have contributed to infection and also assess potential long term complications and outcome

Exceptions

- Patients on day surgery list who underwent non foot and ankle surgery excluded

Findings

PERIOD OF STUDY	13 MONTHS
NUMBER OF PATIENTS	115
POSTIVE CULTURES (INFECTION)	3 (2.6%)
LONG TERM MORBIDITY SECONDARY TO INFECTION	NONE
Readmission rate	0

- 115 patients underwent day case foot and ankle surgery during the audit period of 13 months.
- 9 patients had swabs sent for microbiological analysis.
- Exclusions: 3 patients had pre-existing infection prior to surgery (infected in-growing toe nails (2) and infected granuloma (1)); swabs from 2 patients were intra-operative specimens to rule out pre-existing infection.
- Of the remaining 4 patients, 1 patient did not have any growth and infection was ruled out.

- 3 patients (2 scarf osteotomies and 1 posterior ankle arthroscopy) had positive cultures with clinical evidence of infection. All 3 patients had staph.aureus on cultures from the surgical site and were treated successfully with a course of oral antibiotics.
- No re-admissions of long term morbidity associated.

Observations

- Infection rates continue to be comparable to or lower than reported in literature (below 3%).
- All patients who had an infection grew *staph.aureus sp*, a common organism causing post operative wound infection
- 2 of 3 patients had metal work implanted and received pre-op antibiotic prophylaxis
- All sensitive to Flucloxacillin which is the standard prophylactic pre-op antibiotic
- All patients made uneventful recovery with a course of oral antibiotics likely Flucloxacillin (information not available)
- NO long term morbidity or readmission associated secondary to infection

Discussion

No universally accepted rates of infection exist. It is the aspiration of every unit to achieve the lowest possible infection rates. Current practice involves appropriate pre-op screening for MRSA, surgery in laminar air flow theatres, appropriate pre-operative prophylactic antibiotics.

There is a wide variation in the methodology and definition of surgical site infection in literature and with no consensus. Most literature would suggest infection rates between 2–13%, though most current studies report in the range of 2 - 4.8% following foot and ankle surgery. The infection rates in this audit are similar to studies reported literature.

Recommendations

Continue current practice.

Learning points

- In keeping with recent literature, infections rates among patients undergoing foot and ankle surgery are lower than what is generally believed.

Appendix:

Please attach the data collection tool.

Project Number: 2441

KEY (Change status)

- 1 Recommendation agreed but not yet actioned
- 2 Action in progress
- 3 Recommendation fully implemented
- 4 Recommendation never actioned (please state reasons)
- 5 Other (please provide supporting information)

Clinical Audit Action Plan

Project title	
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Action plan lead		Title:		Contact:	
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Ensure that the recommendations detailed in the action plan mirror those recorded in the "Recommendations" section of the report. The "Actions required" should specifically state what needs to be done to achieve the recommendation. All updates to the action plan should be included in the "Comments" section.

Recommendation	Actions required (<i>specify "None", if none required</i>)	Action by date	Person responsible (<i>Name and grade</i>)	Comments/action status (<i>Provide examples of action in progress, changes in practices, problems encountered in facilitating change, reasons why recommendation has not been actioned etc</i>)	Change stage (see Key)
1.					
2.					