Dorset County Hospital NHS
NHS Foundation Trust

Clinical Audit Report

Project Title:
Infection rates following day case foot and ankle surgery

Specialty/service:
Orthopaedic Surgery

Division:
Surgery

Audit Registration Number:
Audit Ref 2750

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

Specialities Involved: Orthopaedic Surgery

Data Collection Period: Aug 2008 – July 2009

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
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	2001-2012
REPORT DISTRIBUTION LIST	

Key findings

The key below can be adapted to suit your particular project i.e. it may be agreed that only the areas achieving the 90% threshold or above should be coloured green. A decision as to the appropriate thresholds for your clinical audit should be agreed by the multi-disciplinary team. This decision should be made following identification of the clinical guidance/evidence base to be measured against. The "traffic light" colour scheme is a simple way to inform the reader of areas of good practice and areas for improvement.

Key:	Adherence ⩾ 80%	Adherence 60% – 79%	Adherence ⩽ 59%

The table below provides space for each standard to be listed along with the "N" or "n" and the relevant results. If the project is a re-audit extra columns can be added to allow for a comparison to the previous year(s). A column could also be added to compare a particular department with the trust as a whole. Rows can be added for further explanation of the data if this is necessary. Arrows can also be used to indicate areas where adherence to the standards has increased, decreased or remained the same.

If your findings do not fit into a tabular format as below, this section could include the key observations in bullet point format.

No.	Standard	N	Compliance	Compliance	↑ / ↓
1.	*100% Percentage of discharge summaries are issued within 24 hours of discharge*				
2.					
3.					
4.					
5.					
6.					

Recommendations

Recommendations should be made and based on the clinical audit findings.

Incorporate SMART (Specific Measurable Achievable Realistic Timely) principles in all recommendations.

All recommendations in the clinical audit report should be numbered and mirrored in the Action Plan.

E.g. 1. By 31st May 2008, the lead consultant for fractured neck of femur will have updated the local guidelines for the management of fractured neck of femur patients to include standards for the transfer of patients from the Emergency Department to the Orthopaedic Ward within 2 hours of arrival.

Project title

Audit Ref 2750 - Infection rates following day case foot and ankle surgery

Division/type of organisation

Orthopaedic Surgery

Specialities involved

Orthopaedic Surgery

Project lead

Mr Nicolas Savva

Other staff members involved

Mr Satish Ganesan

Background/rationale

Review current practice

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

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

- 139 patients underwent day case foot and ankle surgery during the audit period of 12 months in Weymouth and Dorchester day surgery units.
- 113 patients underwent foot and ankle surgeries and the remaining (26) undergoing other surgeries (knee arthroscopies etc.)
- 3 patients had swabs sent for microbiological analysis.
- Exclusions: 2 patients had pre-existing infection prior to surgery (Zadek's procedure for infected in-growing toe nails () and amputation for osteomylitis (1)).
- 1 patient (Lapidus procedure) had a positive culture with clinical evidence of infection. This was treated successfully with a course of oral antibiotics.
- No re-admissions of long term morbidity associated.

PERIOD OF STUDY (Aug 2008 - July2009)	12 MONTHS
NUMBER OF PATIENTS	113
POSTIVE CULTURES (INFECTION)	1 (0.89%)
LONG TERM MORBIDITY SECONDARY TO INFECTION	NONE
Readmission rate	0

Observations

- Infection rate below 1%.
- *staph.aureus sp,* a common organism causing post operative wound infection was grown on cultures
- metal work was implanted in this patient and he received pre-op antibiotic prophylaxis
- Sensitive to Flucloxacillin which is the standard prophylactic pre-op antibiotic
- Patient made uneventful recovery with a course of oral antibiotics
- 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 a infection rate of 2–13% though most current studies are in the range of 2 - 4.8% following foot and ankle surgery. The infection rates in this audit are well below rates reported in literature.

Recommendations

Continue current practice.
Re-audit in 2011-2012

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: 2750

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	**Infection rates following day case foot and ankle surgery**

Action plan lead		Title:	Contact:

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