

A Study on the Compliance of Surgical Team to Hospital Wide Policy for the Prevention of Surgical Site Infection

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Vision: To be the ultimate healthcare destination - "Mecca of Medicine"

Mission: To provide quaternary care to the community in a compassionate, dignified and distinctive manner.

Moto: The Best is least we can do

Beds: 288 with facility to achieve 1000 beds.

Features:

- 1) Worlds first digital broadband 3 Tesla MRI Machine.
- 2) 256 slice brilliance iCT Scanner
- 3) BiPlane Cardiac Cath Lab
- 4) India's first see through glass lab.
- 5) A state of the art entrance Lobby.
- 6) Facility to promote medical Tourism
- 7) India's first stem cell lab in a hospital.
- 8)Pioneers in Robotic surgery in India.



Introduction

The practice of surgery is very demanding—patients must be scheduled, supplies ordered, staff issues dealt with, and numerous other details must be worked out each and every day. With such a high level of activity, there is a tendency to cut corners to fit everything in to the daily schedule; unfortunately, when this occurs, something is compromised. In the area of infection control, any lack of compliance with published guidelines can result in a significant risk for SSIs, disease transmission and patient safety.

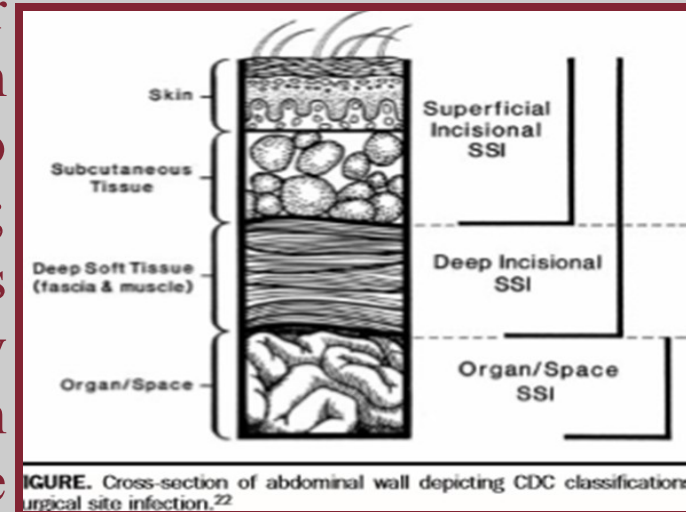


FIGURE. Cross-section of abdominal wall depicting CDC classifications of surgical site infection²²

Objective

To study and analyse the compliance of surgical team to hospital wide policy for the prevention of surgical site infection.

Methodology

Study Design: Observational study- Prospective

Study Area: 288 bedded FMRI (11 OT)

Sample Method: Simple Random Sampling

Sample Size: 45

Data Collection Tool: A checklist was prepared as per the 'Guidelines for Prevention of Surgical Site Infection-1999'

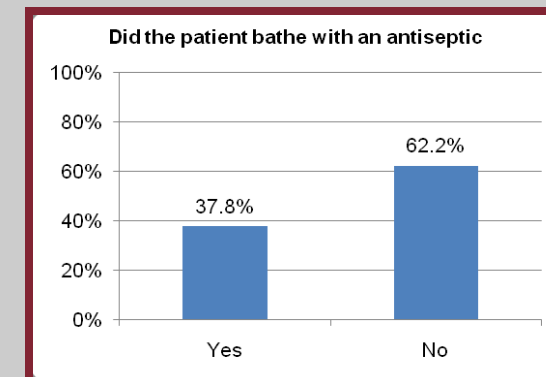
Data Collection Techniques:

- Observing the patients in the ward and pre-operative area.
- Observing the surgeries.
- By studying the patient's medical records.
- By interviewing the nurses.

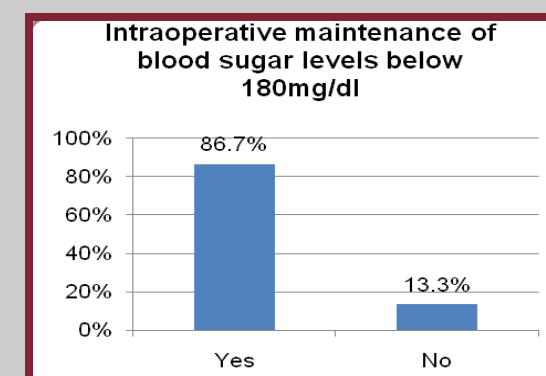
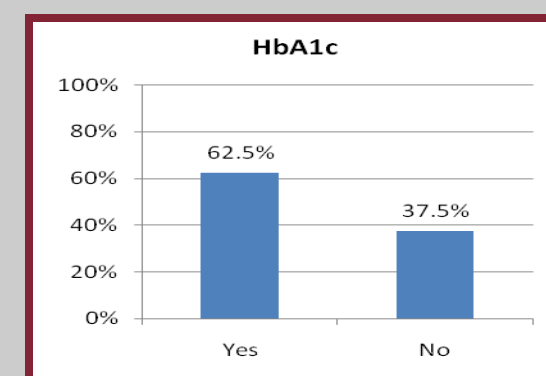
Observation and Analysis

Major problem areas observed during the study:

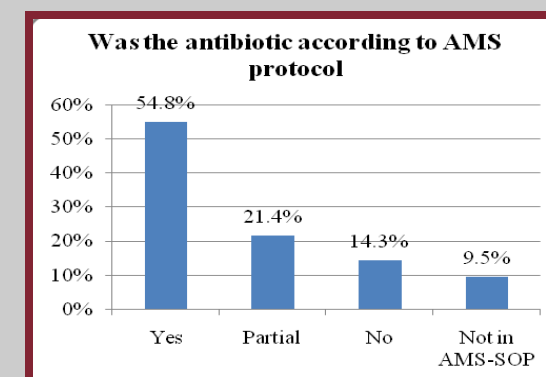
1) Pre-operative shower



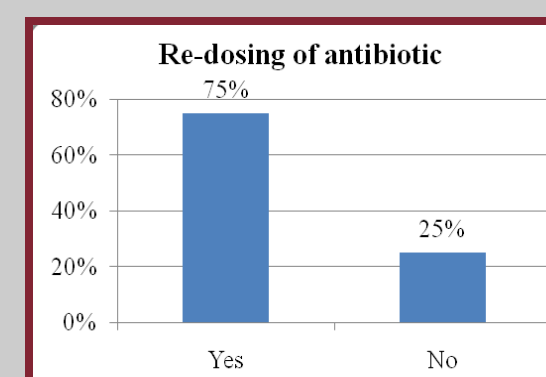
2) HbA1c levels and intra-operative maintenance of blood glucose levels



3) Compliance of administered antibiotics to AMS Protocol

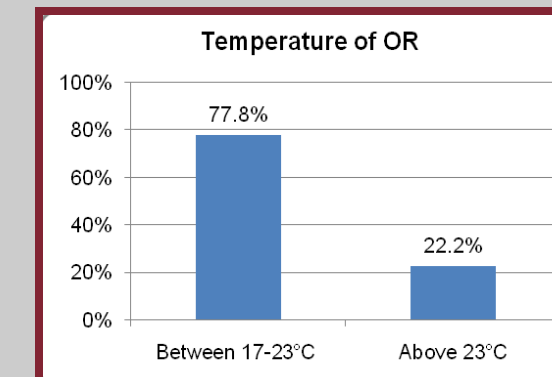


4) Re-dosing of antibiotics

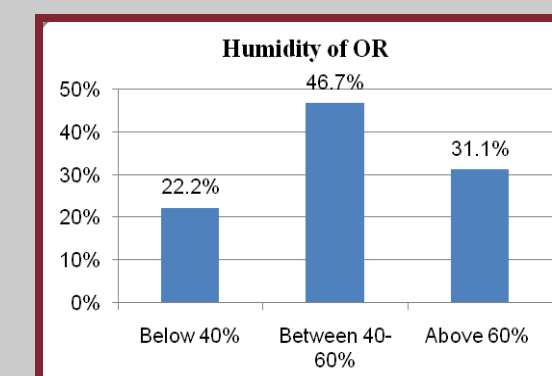


5) Environment of OT

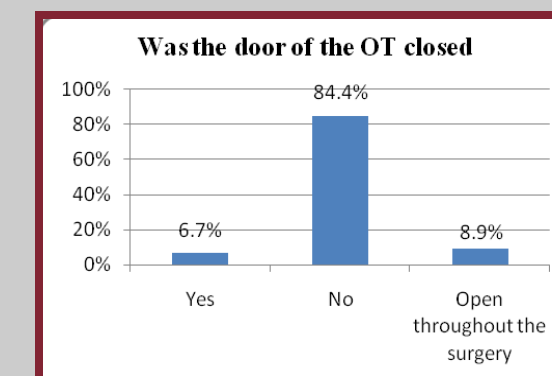
A) Temperature



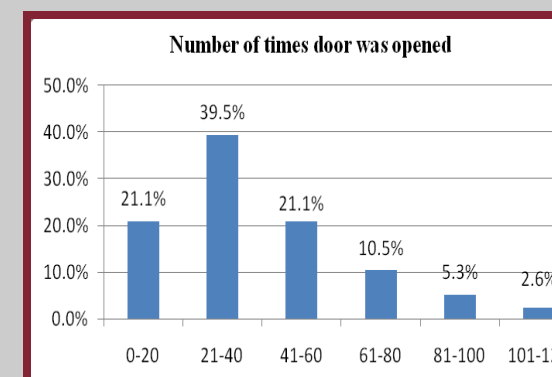
B) Humidity



6) Closure of doors of OT (Zone 3)

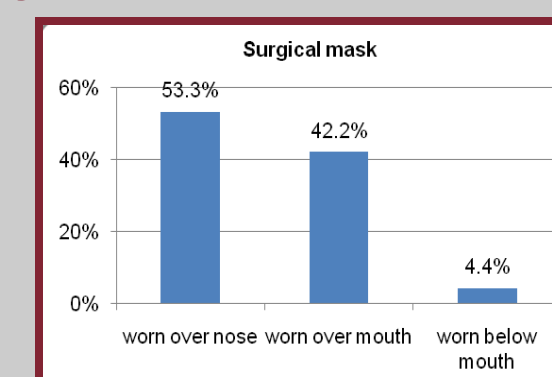


7) Number of times the door was opened



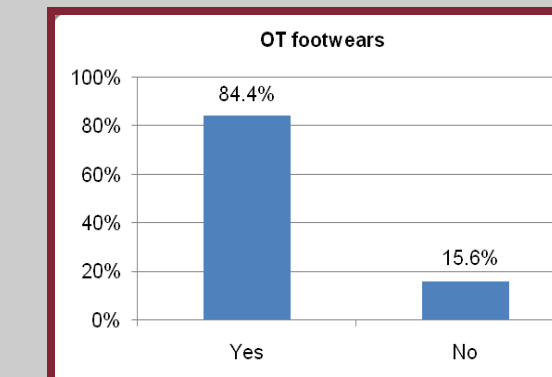
8) Surgical attire

A) Surgical masks

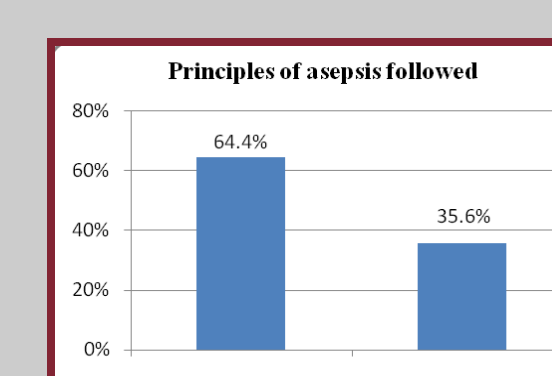


Observations and Analysis

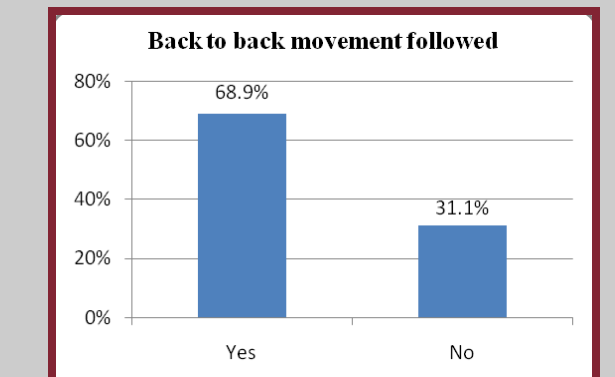
B) OT foot wears



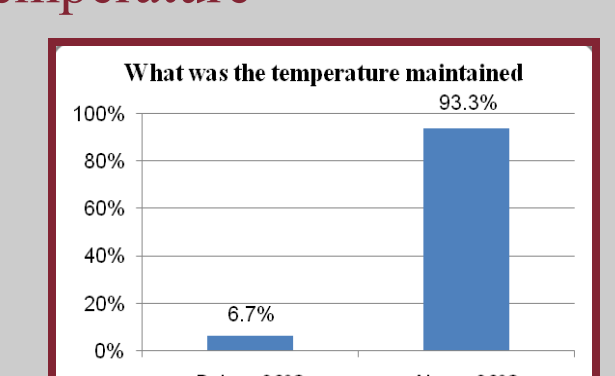
9) Principles of asepsis



10) Back to back movement



11) Intra-operative maintenance of body temperature



The average compliance of all the parameters for the prevention of SSIs in FMRI is 77.98%

Recommendations

- 1.Pre-operative showering of the patients must be included in the pre-operative checklist and making sure that it is being followed.
- 2.HbA1c levels must be tested for all the patients undergoing surgeries and required precautions must be taken if these levels are beyond permissible limits.
- 3.Seminar must be conducted on Antimicrobial Stewardship and then post-test studies should be conducted so as to monitor its sustenance by the Quality department.
- 4.The automatic system for the maintenance of optimal temperature and humidity in OT needs to be recalibrated as per the hospital policy and a regular check must be done by a member of the OT committee.
- 5.A committee should be formed so as to oversee efficient allocation of resources required during procedures taking place in respective OTs.
- 6.A training programme should be carried out to train the health workers about the hospital wide policy. This will take care not only of the knowledge and understanding about the hospital wide policy but also of the incidence of SSIs.
- 7.Each member of surgical team must be issued one pair of OT footwear with their names written on it. For outsiders separate foot wears should be kept.
8. A survey should be done to know the reasons for non-compliance by the surgical team. A committee including anaesthetists, surgeons and nurses must be formed so as to come up with solutions to those problems to increase the compliance rate.