ABIDANCE OF PROTOCOL /GUIDELINES BY THE HEALTH CARE WORKERS/SURGICAL TEAM TO PREVENT SURGICAL SITE INFECTION

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Introduction:

Surgical site infections (SSIs) are defined as infections occurring up to 30 days after surgery (or up to one year after surgery in patients receiving implants) and affecting either the incision or deep tissue at the operation site.

Particularly, SSI can sometimes be superficial infections involving the skin only. Other surgical site infections are more serious and can involve tissues under the skin, organs, or implanted material.

Surgical site infections (SSI) are the second most commonly reported nosocomial infection. They account for approximately a quarter of all nosocomial infections.

They have been responsible for the increasing cost, morbidity and mortality related to surgical operations and continue to be a major problem even in hospitals with most modern facilities and standard protocols of preoperative preparation and antibiotic prophylaxis.

Most SSIs are caused by contamination of an incision with microorganisms from the patient's own body during surgery. Infection caused by microorganisms from an outside source following surgery is less common.

Objective:

To study to analyze the abidance of protocols / guidelines by Health care workers/ surgical team to prevent Surgical Site Infection.This includes Doctors, nurses and technicians engaged in all operration theatres.

Research Methodology:

Study Design: Observational study.
Study population: patients, undergoing surgery,from 4th April to 2nd June 2016 in Fortis Memorial Research Hospital, Gurgaon.
Study Area: 288 bedded FMRI (11 Operation Theaters)

Sample Method: Purposive Sampling.
Sample size: 57 Patients were observed during the summer training.
Data collection tool: Checklist was prepared as per the Guidelines for prevention of surgical site infection-1999. It consists preoperative, intraoperative and postoperative measures to prevent surgical site infection.
Results and Discussion: As mentioned earlier a total 57 surgeries were taken as sample.
4-5surgeries from different departments(Nephrology, ENT, Oncology, Orthopedics, Urology, Obstetrics & Neurosurgery ,MABGIS) were observed as per the checklist prepared, according the Guidelines for prevention of SSI,1999.
Preoperative measures were observed in ward and preoperative room before the patient reached the Operation Theater.
Intraoperative measures were observed in the Operation theater (OT).
Postoperative measures were observed after the patient was shifted from OT to ward.

Observation & analysis:

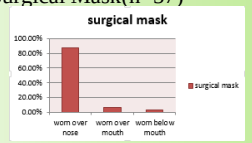
Table 1: Various protocols followed by the surgical team (n=57)

Protocols	Number of cases
1) Hair removed before surgery	44
2) Patient bath with an antiseptic	33
3) HbAlc done	6
4) Intraoperative maintenance of blood sugar levels below 180mg/dl done	6
5) Antibiotic administration before surgery (15-60 min) done	46
6) Door of the OT closed	14
7) Use of Mobile phones in OT	47

Observation & analysis:

1)When was hair removed(n=57)

2)Surgical Mask(n=57)



3)OT footwear's(n=57)

4) Head caps(n=57)

5)No.of times door was opened (n=57

The average abidance of protocol by health care workers/ surgical team for prevention of SSI at FMRI, Gurgaon is 72.8%.

Suggestions:

1) The surgical cases encountered at the hospital should be properly group or color codes can be used according to wound class at the ward to avoid cross transfer of infections.
2) The infection prevention and control team should consistently be supplied with needed logistics so they can maintain the highest possible standards of hygiene at the wards, in theatres, and the hospital environment at large.
3) The number of people, as well as the opening and closing of doors of the operating rooms should be restricted to reduce contamination.
4) HbAlc levels must be tested for all the patients undergoing surgeries and required precautions must be taken for levels are beyond permissible limits.
5) An automatic system should be installed to maintenance optimal temperature and humidity in OT and a regular check must be done by a member of the OT committee.
6) A checklist should be made including all the parameters leading to increased SSIs with the help of the anesthetist, surgeons and nurses and assurance of incorporation of this checklist in patient's medical record before surgery and making sure that it followed.