

(ABSTRACT) Surgical site infection is the most common post-operative complication and represents a significant burden in terms of patient morbidity and mortality and cost to health services around the world. Surgical wound (site) infection is clinically defined as presence of pain at surgical wound, which is accompanied by erythema, induration and local tenderness or presence of purulent discharge at wound site(2)The US Centers for Disease Control (CDC) definition states that only infections occurring within 30 days of surgery (or within a year in the case of implants) should be classified as SSIs. Stitch abscess was not included under SSIs(3)The basic surgical skills of post-operative precaution, pre-operative preparation, excellent surgical technique, fastidious wound care and post-operative management are corner stone's of infection prophylaxis. The advent of antimicrobial therapy has offered an important adjuvant to the prevention of surgical infection.

KEYWORDS : surgical site infection, surgical wound, wound care, antimicrobial therapy

# INTRODUCTION

Today, surgical site infection (SSI), formerly called surgical wound infection, is the third most common nosocomial infection (14-16%) and the first among surgical patients (38%). Of these, two thirds were due to the incision and remaining of organ/space. Three quarters of all deaths among surgical patients with SSI can be attributed to this infection, which in 93% of cases was an organ space (1)Surgical site infection is the most common post-operative complication and represents a significant burden in terms of patient morbidity and mortality and cost to health services around the world.Surgical wound (site) infection is clinically defined as presence of pain at surgical wound, which is accompanied by erythema, induration and local tenderness or presence of purulent discharge at wound site<sup>(2)</sup>The US Centers for Disease Control (CDC) definition states that only infections occurring within 30 days of surgery (or within a year in the case of implants) should be classified as SSIs. Stitch abscess was not included under SSIs<sup>(3)</sup>The basic surgical skills of post-operative precaution, pre-operative preparation, excellent surgical technique, fastidious wound care and post-operative management are corner stone's of infection prophylaxis. The advent of antimicrobial therapy has offered an important adjuvant to the prevention of surgical infection.



### Figure 1: Organ space infection

#### **METHODS**

### SELECTION CRITERIA

- We have included only emergency abdominal surgeries e. g. peptic perforation, enteric perforation, Intestinal obstruction; Blunt abdominal trauma, Penetrating abdominal injury, appendicular and Meckel's pathology etc.
- Only those patients who underwent a first surgical intervention were considered for the study.

### EXCLUSION CRITERIA

 Elective cases, Newborn and infant emergency abdominal surgery, Re-exploratory emergency abdominal surgery, Patients die within 30 days of emergency abdominal surgery.

- Emergency gynecological abdominal surgery
- Various surgeries were classified in classes according to degree of contamination Class I (clean), Class II (clean contaminated), Class III (contaminated) and Class IV (dirty) by operating surgeon or team member.

## AIMS

To find out **causes, risk factor, rate, organism** causing postoperative wound infection in emergency exploratory laparotomy.

### RESULTS







77



# CONCLUSION

In our hospital set up during emergency abdominal surgery rate of wound infection is 32%, which is due to contaminated & dirty surgeries, longer duration of surgery, poor nutritional status, pulmonary disease, medical illness, etc. E.coli and Klebsiella pneumoniae are common organism responsible for wound infection. Wound infection leads to increased morbidity to patient like delayed recovery, increased post-operative stay and increased financial burden to hospital.