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Research Article

PRESCRIBING PATTERN OF ANTIBIOTCS IN POST OPERATIVE CYSTOSCOPY AND LASER TURP

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ABSTRACT

Background: Drug used to treat bacterial infections. Antibiotics have no effect on viral infections. Originally, an antibiotic was a substance produced by one microorganism that selectively inhibits the growth of another. Synthetic antibiotics, usually chemically related to natural antibiotics, have since been produced that accomplish comparable tasks.

Method: The study was a prospective observational study and conducted at a tertiary care hospital. Collected the case of the patients treated with antibiotics for postoperative patients. Analyzing the prescription and categorizing it into varieties based on antibiotics prescribed, route of administration and the prescriptin pattern.

Result. The duration of therapy with antibiotics was ranging from one day,three days and five days). It was found that the highest number was prescribed with cefuroxime (1.5mg) and piperacillin/tazobactam(4.5mg), and in combination with piperacillin/tazobactam and Amikacin(4.5gm+750mg).

Conclusion: The most commonly prescribed antibiotics in the postoperative inpatients were found to be the cefuroxime followed by piperacillin/tazobactam and in combination of piperacillin/tazobactam and Amikacin. The use of these drugs seems to be effective in reducing the surgical site infection and other complications. There were no significant differences in prescribing the antibiotic with respect to age, gender, comorbid, height, weight and different surgeries.

INTRODUCTION

Antibiotics, also called antibacterials, are a type of antimicrobial drug used in the treatment and prevention of bacterial infections They may either kill or inhibit the growth of bacteria. Antibiotics are one of the pillars of modern medical care and play a major role both in the prophylaxis and treatment of infectious diseases. The issues of their availability, selection, and proper use are of critical importance to the global community. Antibiotics, which were used for the prophylactic and treatment regimens in this study, were the same (broad spectrum agents largely); and combinations of two or three antibiotics were common. Although the simultaneous use of two or more antibiotics has a certain rationale, indiscriminate or routine combination of antibiotics may have several negative consequences, primarily to the patient. Antibiotics are the most frequently prescribed drugs among hospitalised patients especially in intensive care and surgical care. Programs designed to encourage appropriate antibiotic prescription in health institutions are an important element in quality of care, infection control and cost containment. The need for the study was the lack of uniformity in prescribing attitudes. monitoring and controlling antibiotic use is needed. Availability of a single formulation of drug under various brands drives for a need to analyze which brand is more cost effective to the patient

An appropriate prophylactic antibiotic should

- Prophylactic antibiotics should be initiated within one hour before surgical incision, or within two hours if the patient is receiving vancomycin or fluoroquinolones.
- Patients should receive prophylactic antibiotics appropriate for their specific procedure.
- Prophylactic antibiotics should be discontinued within 24 hours of surgery completion (within 48 hours for cardiothoracic surgery).
- Surgical site hair removal should be appropriate for the location and procedure (e.g., clippers, depilation, no hair removal).
- An appropriate prophylactic antibiotic should (1) be effective against microorganisms anticipated to cause infection (2) achieve adequate local tissue levels (3) cause minimal side effects (4) be relatively **inexpensive,** and (5) not be likely to select virulent organism.
- PROPHYLAXIS OF SURGICAL SITE INFECTION:

Surgical site infection (SSI) includes superficial incisional infections, deep incisional infections (of soft tissue) and organ/space infection. The purpose of surgical prophylaxis is to reduce the incidence of SSI with minimal alteration of normal microbial flora of the host and minimal adverse effects.

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MATERIALS AND METHODS:

The study was a prospective observational study was conducted in the Department of General medicine at fortis Hospital which is a 250 bedded hospital located at bannargatta, hospital and carried out in 32 postoperative patients who were prescribed with the antibiotics after the urology surgery and those who fulfilled the exclusion and inclusion criteria were selected for the study. The study were carried over two months. Collected the case of the patients treated with antibiotics for postoperative patients. Analyzing the prescription and categorizing it into varieties based on antibiotics prescribed, route of administration and combinations cost prescribed.

STUDY CRITERIA

Inclusion criteria

✓ Any age.

✓ Patients of either sex.

✓ Patients who have been through a surgery.

✓ Patients to whom antibiotic prescribed in post-operative ward.

✓ Patients with with or without Comorbid conditions.

Exclusion criteria

✓ Patients operated in emergency.

✓ Pregnant women.

✓ Patients who were failing to come for a follow up to 30 days since the day of discharge.

✓ Out patients

RESULTS AND DISCUSSION

On the basis of inclusion and exclusion criteria, 32 patients were selected from the surgical unit over a period of two months for the present study. Most of the patients were under the age group of 30 - 80 years(fig.1). Most of the patients with co morbid conditions like DM(11%), HTN)(7%),IHD(4),CVA(2). During the study it was observed that all patients undergoing surgery were prescribed with antibiotics for postoperative patients. The duration of therapy with antibiotics was ranging from one day,3 days and 5 days.). Fig.3: Out of (n= 32) . It was found that the highest number was prescribed with cefuroxime (1.5mg) and piperacillin/tazobactam(4.5mg), and in combination with piperacillin/tazobactam and Amikacin(4.5gm+750mg).

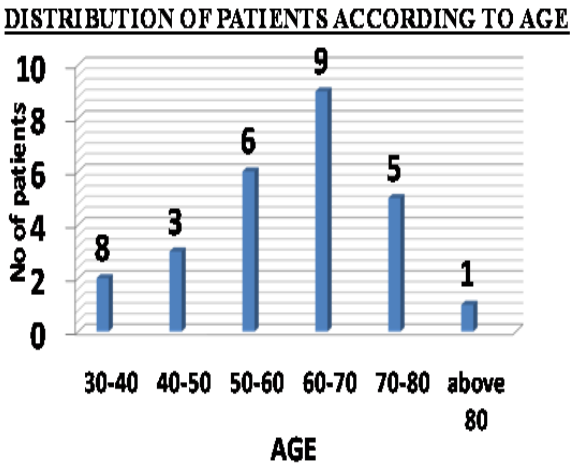

Figure 1:

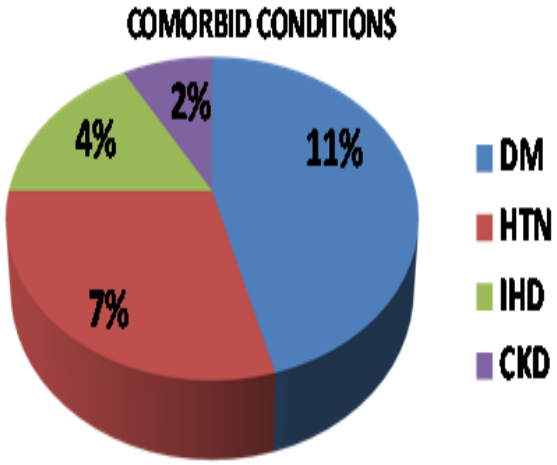

Figure 2:

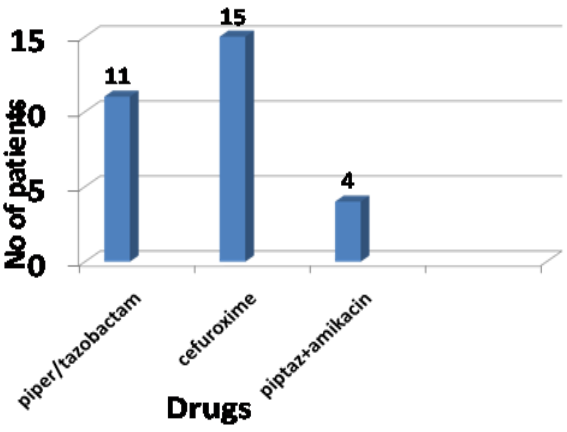

Figure 3:

Conclusion

The most commonly prescribed antibiotics in the postoperative inpatients were found to be the cefuroxime followed by piperacillin/tazobactam and in combination of piperacillin/tazobactam and Amikacin. The use of tthese drugs seems to be effective in reducing the surgical site infection and other complications. There were no significant differences in prescribing the antibiotic with respect to age, gender, comorbid, height, weight and different surgeries.

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