Abstract

COMPARISON OF ANTIBIOTIC USAGE-THIRD GENERATION CEPHALOSPORIN SINGLE DOSAGE Vs MULTIPLE DOSAGE IN CASE OF EMERGENCY OPEN UNCOMPLICATED APPENDICECTOMY

Keywords: Acute Appendicitis, Emergency Appendicectomy, Laparoscopic Appendicectomy, Third Generation Cephalosporins, Cefoperazone Sulbactam, Wound Infection

INTRODUCTION

Acute Appendicitis is the most common general surgical emergency and early surgical intervention improves outcome which makes Appendicectomy, the most commonly performed emergency operation in the world. Most patients with acute appendicitis are managed by prompt surgical removal of the appendix. If untreated or delay in treatment would result in fatal complications. If simple acute appendicitis is encountered, there is no benefit in extending antibiotic coverage beyond 24 hrs. For intraabdominal infections of GI tract origin that are of mild to moderate severity, the Surgical Infection society has recommended single-agent therapy with cefoxitin, cefotetan or ticarcillin-clavulanic acid. But in daily practice multiple doses are used to prevent complications like wound infection and intra abdominal abscess. Antibiotics should be administered 30 minutes prior to incision to achieve adequate tissue levels. In non-perforated appendicitis, single preoperative dose of antibiotic suffices. In cases of perforation, an extended course of at least 5 days of antibiotics is advocated.

AIMS & OBJECTIVES

- To know the outcome of single dose antibiotic (cefaperazone sulbactam) in cases of emergency open uncomplicated appendectomy.

- To compare single dose (cefaperazone sulbactam) with multiple doses of antibiotics in case of emergency open uncomplicated appendectomy.

DURATION: JAN 2014 TO SEP 2014
STUDY DESIGN: Prospective study

SAMPLE SIZE: 300

INCLUSION CRITERIA: Patients presenting with clinical features suggesting of acute appendicitis - anorexia, right iliac fossa pain, nausea, vomiting and fever are included in the study.

EXCLUSION CRITERIA:
• Patients with perforated appendicitis, appendicular abscess, appendicular mass formation

METHODOLOGY
• Patients presenting with clinical features suggesting of acute appendicitis - anorexia, right iliac fossa pain, nausea, vomiting and fever admitted in emergency department of our hospital from January 2014 to November 2014 will be enrolled in our study.
• These patients will be given single dose of cefaperazone sulbactam 1.5gm IV half an hour prior to incision.
• The above group will be compared to those cases with administration of multiple doses of antibiotics.
• The results are analyzed using Microsoft Excel for tabular transformation and graphical representation. For comparing the parameters and statistical analysis 2 sample z-test will be used.

CONCLUSION
It is evident that prophylactic multiple doses of Cefaperazone sulbactam postoperatively confer no additional benefit over a single preoperative dose of Cefaperazone sulbactam. With additional benefits of the greater ease of administration and decreased cost, single dose Cefaperazone sulbactam is the prophylaxis of choice for appendicectomy in patients with nonperforated appendicitis in our study. It is essential for Surgeons and Surgical departments to update their routine practice of antibiotic prophylaxis to comply with updated guidelines and evidence base so as to avoid overuse of antibiotics and their multiple dosage schedule in order to prevent the emerging menace of drug resistance as well prevent the side effects in patient’s perspective.