

## Study of prescribing pattern of anti microbials use in patients undergoing open and laproscopic appendectomy in RMMCH

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### Abstract

**Objectives:** The study of prescribing pattern of anti microbials used in patients undergoing open and laproscopic appendectomy is a retrospective study done in RMMCH.

**Method:** Random prescriptions were collected within the time period of (JAN 2016-JUNE 2016) and the relevant information analysed.

**Results:** A total number of 50 prescriptions were analysed of patients who had undergone appendectomy surgery. Among the surgery cases, patients (96.36%) received cephalosporins. In this group, most commonly prescribed was cefotaxime. Metronidazole being most commonly prescribe drug along with cephalosporins. Anti microbials such as gentamycin and amikacin were prescribed to very small group of people.

**Conclusion:** Cephalosporins are the preferred anti microbials for surgical prophylaxis of aerobic infections and are prescribed in over 90% of cases either alone or concurrently with other antimicrobials. However, there is an increase in prescription of beta lactamse inhibitor combinations which in all likelihood is due to development of resistance to monotherapy with penicillin group of drugs.

**Keywords:** Laproscopy, acute appendicitis, laproscopic appendectomy, open appendectomy

### Introduction

Appendicitis is a common cause of acute abdomen. Appendicitis means inflammation of the appendix. Symptoms include abdominal pain, loss of appetite which may progress to nausea and even vomiting and appendectomy is the treatment of choice, which can be done either by open or laproscopic approach. This study is to observe the prescribing pattern of antimicrobials in patients undergoing open appendectomy and laproscopic surgery in

RMMCH. Once diagnosis of laproscopic appendectomy appendicitis is made, an appendectomy usually is performed. Antibiotics are begun prior to surgery and as soon as appendicitis is suspected. The treatment of appendicitis begins with intravenous fluids and antibiotics. The antibiotic regimen must provide broad-spectrum coverage of enteric organisms. The patients with perforate appendicitis will require antibiotic therapy post-operative until clinical resolution has occurred.

**Materials and methods**

This study was retrospective done in rajah muthaih medical college and hospital from January 2016 to June 2016; 50 patients who were diagnosed to have appendicitis and requiring surgical intervention were selected. Patients were randomly chosen to undergo open and laproscopic appendectomy. 29 patients had undergone laproscopic surgery and 21 patients had undergone open appendectomy data was collected from each patient on the basis of clinical, Pre-operative finding as well as postoperative recovery and follow up.

**Table 1: Age group with frequency of patients.**

Age Group	Frequency	Percentage
11-20	13	26
21-30	17	34
31-40	20	40
TOTAL	50	100

**Table 1.2: Gender distribution.**

	Frequency	Percentage
FEMALE	15	30
MALE	35	70
TOTAL	50	100

**Table 1.3: Type of surgery.**

Type of Surgery	Frequency
Open appendectomy	29
Laproscopic appendectomy	21
TOTAL	50

**Results**

70% of patients were male and 30% were female of age between 15 to 45 yrs. nausea and vomiting were the common symptoms. Post-operative complications, length of stay, time to return back to work were all lesser among patients who underwent laproscopic

appendectomy. A total of 50 prescriptions were analysed of patients who had undergone appendectomy surgery. Among the surgery cases, patients (96.36%) received cephalosporins. In this group, most commonly prescribed were cefotaxime. Metronidazole being most commonly prescribed drug along with cephalosporin. Anti microbials such as Gentamycin and Amikacin were prescribed to very small group of peoples.

**Conclusion**

Cephalosporins are the preferred anti microbials for surgical prophylaxis of aerobic infections and are prescribed in over (90%) of cases either alone or concurrently with other anti microbials. However, there is an increase in prescriptions of beta lactamase inhibitors combinations which in all likelihood is due to development of resistance to mono therapy with pencillin group of drugs.

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