Original Research Article

Frequency of wound infection in non-perforated appendicitis with use of single dose pre-operative antibiotics

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International Archives of Integrated Medicine, Vol. 4, Issue 6, June, 2017.

Available online at http://iaimjournal.com/
ISSN: 2394-0026 (P) **ISSN: 2394-0034 (O)**
Received on: 18-05-2017 **Accepted on:** 30-05-2017
Source of support: Nil **Conflict of interest:** None declared.
How to cite this article: R. Abraham Jebakumar, P. Ezhil. Frequency of wound infection in non-perforated appendicitis with use of single dose pre-operative antibiotics. IAIM, 2017; 4(6): 99-101.

Abstract

Background: Antibiotics are used both pre and post operatively in acute appendicitis for preventing wound infection. It has been observed that the routine use of postoperative antibiotics is not necessary in cases of non-perforated appendicitis as only prophylactic antibiotics are sufficient to prevent wound infection.
Aim: The aim of this study was to see the frequency of wound infection with the single dose pre-operative antibiotics.
Materials and methods: Present observational study was conducted at Department of General Surgery, Govt. Stanley Medical College and Hospital for period of one year**.** A total of 100 patients with non-perforated appendicitis were followed for wound infection till 8th postoperative day.
Results: 100 patients, 64 male and 36 female were included in this study. In entire series, 6 patients were developed wound infection. The infection was minor which settled with conservative therapy. Prophylactic single dose antibiotic is efficacious in 94% patients.
Conclusion: Single dose pre-operative antibiotics were found to be effective in controlling post-operative wound infection without the need of extending antibiotics to post-operative period in cases of non-perforated appendicitis.

Key words

Non-perforated appendicitis, Single dose-antibiotics.

Introduction

Acute appendicitis is the most common cause of acute abdomen in young adults. Before puberty male: female ratio is equal which increases to 3:2 at the age of 25. Appendicectomy is the treatment of choice for acute appendicitis. Post-operative wound infection can increase morbidity. Appendicectomy for non-perforated appendicitis is a clean contaminated surgery. Antibiotics are used both pre and postoperatively in acute appendicitis for preventing wound infection, antibiotics are to be give 30 min to 1 hour prior to surgery. It has been observed that the routine use of post-operative antibiotics is not necessary in cases of non-perforated appendicitis as only prophylactic antibiotics are sufficient to prevent wound infection. The aim of the study is to see the frequency of wound infection in non-perforated appendicitis with single dose preoperative antibiotics [1-4].

Materials and methods

Present observational study was conducted at Department of General Surgery, Govt. Stanley Medical College and Hospital for period of one year**.** Total 100 patient undergoing appendicectomy for non-perforated appendicitis were included.

Exclusion criteria

- Patient's age <18 years and >65 years were excluded from the study
- Patients with diabetes mellitus
- Patients with appendicular abscess
- Patients on steroids
- HIV, HBV, HCV positive patients
- Patients who have received antibiotics within 72 hours of admission

Results and Discussion

This observational study was done in patients admitted in Department of General Surgery, Stanley Medical College from January 2016 to December 2016. Total 100 patients, 64 male and 36 female were included in this study. In entire series, 6 patients were developed wound infection. The infection was minor which settled with conservative therapy. Prophylactic single dose antibiotic was efficacious in 94% patients.

Table - 1 documents the age distribution of the patients taken for the study. **Table - 2** shows percentage of infections in tat divided age groups.

Table – 1: Age distribution of the patients taken for the study.

Age Group (Years)	Total
18-30	61
30-40	22
40-50	11
50-65	6

Table – 2: Percentage of infections in that divided age groups.

Age group (Years)	No. of patients got infection	%
18-30	1	1 %
30-40	1	1%
40-50	2	2%
50-60	2	2%

Conclusion

Single dose pre-operative antibiotics were found to be effective in controlling post-operative wound infection without the need of extending antibiotics to post-operative period in cases of non-perforated appendicitis.

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