

Original article:

Postoperative complications in acute appendisectomy: Observational study

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Abstract:

Introduction: Appendectomy is one of the most frequently performed surgical procedures in the world. The morbidity rate of acute appendicitis is 10% and its mortality rates range from 0.24% to 4%.

Material and methods: The present work was carried out in our Department of surgery in our YCM Hospital, Pimpri, Pune, in last eight months. This was retrospective study collected information retrospectively from 50 patients either from interview as well as previous records. All the patients admitted in last one year were included in study except the patients that were not take regular follow up – were excluded from present study. We excluded patients with operated with other complications. Patients were excluded with not taking follow up in study.

Results: In our present study mean age of patients were 32.80 years with SD 5.21 years. Male dominance (68 %) was observed in our study. In our present study, out of 50 cases postoperative complications were found only in 4 cases. (8 %) Wound infection was most common postoperative complication was observed in 4 % cases.

Conclusion: Wound infection was most common postoperative complication was observed in our present study.

Introduction:

Appendectomy is one of the most frequently performed surgical procedures in the world. The morbidity rate of acute appendicitis is 10% and its mortality rates range from 0.24% to 4%. It is the most frequently diagnosed disease among emergency surgeons and it accounts for about 20% of all surgical interventions. (1) Appendectomy is the gold standard treatment, recognized for more than a century, since its description by McBurney, in 1894. (2) The operation can be performed as an open or laparoscopic surgery, depending on the surgeon's experience, hospital characteristics, and factors related to the patient.

Recent studies suggest the efficacy of exclusive antibiotic therapy for the treatment of specific cases, especially for uncomplicated appendicitis, as an alternative to surgical treatment; however, such an indication remains controversial and debatable. (3) The current guideline of the Society of American Gastrointestinal and Endoscopic Surgeons and the consensus of The European Association for Endoscopic Surgery place surgery as the gold standard for the treatment of acute appendicitis Postoperative complications should be considered when choosing the best management option, however, few studies describe the relevant risk factors for these complications.(4)

Material and methods:

The present work was carried out in our Department of surgery in our YCM Hospital, Pimpri, Pune, in last eight months. This was retrospective study collected information retrospectively from 50 patients either from interview as

well as previous records. All the patients admitted in last one year were included in study except the patients that were not take regular follow up – were excluded from present study.

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The samples were collected using randomly. All data was tabulated in Excel sheet and analyzed.

Results:

In our present study mean age of patients were 32.80 years with SD 5.21 years. Male dominance (68 %) was observed in our study.

Table 1) Post surgical complications distribution

Post surgical complications	Number of patients
Yes	4
No	46
	50

Table 2) Post surgical complications

Post surgical complications	Number of patients	Percentage
Wound infection	2	4
Abscess formation	1	2
Peritoneal cavity infection	1	2
Bowel obstruction	1	2

In our present study, out of 50 cases postoperative complications were found only in 4 cases. (8 %) Wound infection was most common postoperative complication was observed in 4 % cases.

Discussion:

Complicated appendicitis proved to be an important predictor of risk for postoperative complications. This finding confirms other analyzes that have demonstrated association of complications with the evolutionary phase of appendicitis, although these studies do not show increase in chance as high as presented here . Complicated appendicitis increases the risk of postoperative complications, particularly in Clavien-Dindo \geq III Group, leading to an *odds ratio* of 12.41. Therefore, patients diagnosed with this type of appendicitis deserve more postoperative care for the early management of possible complications.(5)

The frequency of complications after appendectomy is about 9% (2) The predictive value of CRP as an indicator of postoperative complications has been addressed in a small number of studies. In our present study, out of 50 cases postoperative complications were found only in 4 cases. (8 %) Wound infection was most common postoperative complication was observed in 4 % cases.

There has been a dramatic reduction in the mortality rate attributed to acute appendicitis over the past 50 years from nearly 26% to less than 1%.⁶ However, the morbidity rate, which has heavily impacted health care costs, has not

experienced a similar drop.^{7,8} Identifying risk factors that predict the likelihood of complications associated with appendicitis is a crucial step in managing these patients. (6) This has traditionally been accomplished through retrospective reviews, which are often flawed. Limitations of retrospective reviews include inconsistent data gathering techniques and nonuniform definitions for the complications under investigation. Also, such reviews often represent the experience of a limited number of specialists at a single institution.

Conclusion:

Wound infection was most common postoperative complication was observed in our present study.

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