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Research Article

A comparative study of laparoscopic appendicectomy versus open appendicectomy

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ABSTRACT

Background: Open appendicectomy has been safe and effective for acute appendicitis for more than a century. Recently, several authors proposed that the new technique of laparoscopic appendicectomy should be the treatment for acute appendicitis. Therefore, the aim of this study is to evaluate and compare laparoscopic appendicectomy with open appendicectomy in general surgical practice.

Methods: This prospective randomized controlled study was carried out over a period from October 2012 to October 2015 in the department of general surgery K.P.C. Medical College and Hospital, Kolkata. Patients between 18 years and 60 years of age were candidates for randomization. The total population group included 144 patients with a mean age of 39 years.

Results: Comparative studies of laparoscopic and open appendicectomy shows that hospital stay and wound infection rates are significantly lower after laparoscopic appendicectomy. As compared to laparoscopic appendicectomy prevalence of intra-abdominal abscess was less in open appendicectomy. Similarly, shorter operating time was found in patients randomized to open appendicectomy compared with laparoscopic appendicectomy. There were shorter period of convalescence and better cosmesis observed in the laparoscopic group. However, no single case of pneumonia was reported in the post-operative period in both appendicectomy.

Conclusions: From the present study, we can conclude that laparoscopic appendicectomy has been shown to be both feasible and safe in comparison with open appendicectomy. However, because of the competition of laparoscopic and open appendicectomy, open appendicectomy has improved greatly. The benefit of laparoscopic appendicectomy over the open appendicectomy will be a question.

Keywords: Open appendicectomy, Laparoscopic appendicectomy, Comparative study

INTRODUCTION

The human vermiform appendix I usually referred to as "A vestigial organ with no known function". Currently available evidence suggests that appendix is a highly specialized part of the alimentary tract. Lymphoid tissue first appears in the human appendix about 2 weeks after birth.

Laparoscopic appendicectomy has been shown to be both feasible and safe in randomized comparisons with open appendicectomy, in addition to improve diagnostic accuracy.[1] It confers advantages to the patient in terms of fewer wound infections, less pain, faster recovery and earlier return to work.[1,2]

Open appendicectomy was based on the hypothesis that laparoscopic appendicectomy would prove superior to open appendicectomy in terms of hospital study, post-operative morbidity like pain, complication like wound infections, intra-abdominal abscess, ileus, cosmesis, operating time, earlier return to normal activity and work.[2-4]

Acute appendicitis is the most frequent cause of persisting progressive abdominal pain in all ages. The

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Research Article

A study of outcome of repair of ventral abdominal hernia by shoelace darn method

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ABSTRACT

Background: Ventral abdominal of hernia is very common pathology in general surgical practise. Numerous surgical procedures have been described to repair them, with varying degree of success. This study aims to find the place of shoelace darn in the repair of ventral abdominal hernia.

Methods: The retrospective study of 36 cases of ventral abdominal hernia and prospective study of 26 cases of postoperative ventral abdominal hernias repaired by the shoelace darn technique was carried out over a period from July 2008 to 2011 and from July 2011 to 2014 respectively in the department of general surgery K.P.C. Medical College and Hospital, Kolkata, India.

Results: Shoelace darn repair of ventral abdominal of hernia was relatively easy procedure associated with fewer complications. There were rare true recurrences noted.

Conclusions: From the present study we can conclude that, Shoelace darn repair still remains an excellent technique in the management of ventral abdominal of hernia, despite advent of mesh and laparoscopic repair.

Keywords: Ventral abdominal hernia, Shoelace repair, Mesh, Laparoscopic

INTRODUCTION

Ventral hernia is a protrusion of an abdominal viscus or part of a viscus through the anterior abdominal wall occurring at any site other than the groin. It includes incisional hernias, para-umbilical hernias; umbilical hernia, epigastric hernias, and spigelian hernias, respectively. Occurrence of ventral abdominal of hernia is very common.[1]

The formation of ventral hernias is a multifactorial and complex process. Three types of ventral hernias are recognized: Spontaneous, congenital, and incisional hernias. In 90% of patients, it is an acquired defect that is a direct result of increased abdominal pressure. Causes of this increase in abdominal pressure include multiparous status, obesity, and cirrhosis with ascites.[2,3]

Operative management of ventral hernias

For many years, the repair of incisional hernia was associated with a high recurrence rate. In more recent years, the introduction of synthetic prosthetic materials has provided the opportunity to perform a tension free repair, thereby reducing the rate of recurrence.

With the development of modern synthetic non absorbable materials, three basic operative methods have emerged for repair of ventral abdominal hernia;

- Re-suture[7]

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Original Research Article

Pre-operative anti-microbial administration for prevention of post-operative infections in patients with open cholecystectomy and laparoscopic cholecystectomy

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ABSTRACT

Background: Prophylactic antibiotics are used in many elective surgeries by the surgeons to prevent postoperative wound infections. The present study was done with the aim to find out the efficacy of antibiotics to reduce the bacterial load.

Methods: This prospective study was done in KPC Medical College from January 2015-December 2015. A total number of 56 patients with symptomatic gall stone disease were included in the study. Of them, 36 patients underwent laparoscopic cholecystectomy (group A) and 20 patients underwent open cholecystectomy (group B). 18 cases who underwent laparoscopic procedure and 10 cases who underwent open procedures were given preoperative antibiotics while the other half did not receive preoperative antibiotics. Postoperative wound infection was analysed by wound swab culture.

Results: Female preponderance was seen in the study (M:F-1:7). Majority of them belongs to 21-30years of age. Postoperatively wound infection was seen in 6 cases in group A and in 4 cases in group B and the difference was statistically significant ($p<0.05$). The positive rate of bacteria by wound swab culture was higher in NPTG cases in both group A (n=7) and group B (n=4) and the difference was statistically significant among two groups. No complications and mortality were reported in the study.

Conclusions: This study document that administration of prophylactic antibiotics before cholecystectomy will reduces the incidence of postoperative wound infections.

Keywords: Laparoscopic cholecystectomy, Open cholecystectomy, Prophylactic antimicrobials, Postoperative infections

INTRODUCTION

Cholecystitis is the inflammation of gallbladder which is one of the commonest abdominal pathologies encountered by the surgeons. Chronic cholecystitis is a long-standing disability suffered by patients to a great extent. It is caused by mechanical or functional dysfunction of the emptying of the gall bladder.[1]

The incidence of cholecystitis is more common in females compared to males primarily child bearing age group. Sex hormones mainly estrogens are most likely to be responsible for the increased risk.[2]

The incidence of wound infection and postoperative complications greatly depends on the particular causative organisms responsible for the occurrence of chronic

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Original Research Article

Clinico-pathological study of liver abscesses with special reference to different treatment options

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ABSTRACT

Background: Liver abscess is a serious life threatening condition if left untreated. Most of them were amoebic in nature in tropical countries. The present study was done with the aim to assess the epidemiology of liver abscesses, to determine the fast, accurate and cost effective diagnostic approaches and to find out the best mode of management for amoebic liver abscess (ALA) and pyogenic liver abscess (PLA) in the study population.

Methods: This was a prospective study done at KPC Medical College and Hospital for a period of 2 years, from June 2013 to May 2015. A total of 50 patients diagnosed with liver abscess were included in the study. Patients were categorized into ALA and PLA cases based on the type of abscess cavity. Authors have studied correlation of socio-demographic factors with disease, etiology, diagnostic findings, types of treatment and their outcome in the study population.

Results: ALA was the most common type among the study groups (90%). Male preponderance was seen. Majority of them belongs to low-socioeconomic status (80%). The most common etiology of PLA was E. coli. Ultrasonography (USG) of the abdomen was accurate and cost-effective diagnostic procedure for assessing liver abscesses. Percutaneous catheter drainage was the most effective method of treatment (with a 100% success rate) in both ALA and PLA cases.

Conclusions: Most of the patients in the study had ALA and had a chronological association with alcohol addiction, diabetes and low-socioeconomic status. Rapid diagnosis of the condition (ALA and PLA) with USG will reduce the rate of morbidity and mortality in the patients.

Keywords: Catheter drainage, Liver abscess, Ultrasonography

INTRODUCTION

Liver abscess is potentially a life-threatening condition resulting from the invasion and multiplication of microorganisms either directly from injured blood vessels or by the biliary ductal system.[1,2] Abscess of liver were of many types. Among them amoebic liver abscess (ALA) and pyogenic liver abscess (PLA) were the most commonly seen in the population.[3] In tropical and subtropical countries, about 50-70% liver abscess cases were of amoebic in origin.[4] The common cause of PLA was biliary disease. The rate of incidence ranges from 1.1 to 2.3 cases per 1 lakh population every year and the common etiological factors are known to be the *Escherichia coli, Klebsiella* and *Streptococcus*.[5]

The diagnosis of liver abscess is confirmed by ultrasonography (USG), blood culture and abscess aspirate. Both ALA and PLA are found to be the important causes of morbidity and mortality in tropical countries. Conservative management with antibiotics is the main stay of treatment for ALA and PLA in initial

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1.	A COMPARATIVE STUDY OF LAPAROSCOPIC APPENDICECTOMY VERSUS OPEN APPENDICECTOMY	FIRST AUTHOR	INTERNATIONAL SURGERY JOURNAL	1) Index Copernicus (ICV 2017: 100.00, ICV 2016: 88.30, ICV 2015: 87.68, ICV 2014: 86.46, ICV 2013: 5.81) 2) Index Medicus for South-East Asia Region (WHO) 3)JournalTOCs 4)CrossRef Journal Index 5)Google Scholar 6)J-Gate 7)Directory of Science 8)ResearchBib 9)ICMJE 10)SHERPA/RoMEO	DOI: http://dx.doi.org/10.18203/2349-2902.isj20160905 pISSN 2349-3305 / eISSN 2349-2902	MAY, 2016
2.	A STUDY OF OUTCOME OF REPAIR OF VENTRAL ABDOMINAL HERNIA BY SHOELACE DARN METHOD	FIRST AUTHOR	INTERNATIONAL SURGERY JOURNAL	1) Index Copernicus (ICV 2017: 100.00, ICV 2016: 88.30, ICV 2015: 87.68, ICV 2014: 86.46, ICV 2013: 5.81) 2) Index Medicus for South-East Asia Region (WHO) 3)JournalTOCs 4)Cross Ref Journal Index 5)Google Scholar 6)J-Gate 7)Directory of Science 8)Research Bib 9)ICMJE 10)SHERPA/RoMEO	DOI: http://dx.doi.org/10.18203/2349-2902.isj20161166 pISSN 2349-3305 / eISSN 2349-2902	MAY, 2016
	Pre-operative anti-microbial administration for prevention of post-operative infection in patients with open cholecystectomy and laparoscopic cholecystectomy.	FIRST AUTHOR	INTERNATIONAL SURGERY JOURNAL	1) Index Copernicus (ICV 2017: 100.00, ICV 2016: 88.30, ICV 2015: 87.68, ICV 2014: 86.46, ICV 2013: 5.81) 2) Index Medicus for South-East Asia Region (WHO) 3)JournalTOCs 4)Cross Ref Journal Index 5)Google Scholar 6)J-Gate 7)Directory of Science 8)Research Bib 9)ICMJE 10)SHERPA/RoMEO	DOI: http://dx.doi.org/10.18203/2349-2902.isj20190077 pISSN 2349-3305 / eISSN 2349-2902	February 2019

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