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INDEX

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Volume - 05	Number - 02	July – December 2022

CONTENTS

EDITORIAL

1 **Mental health disorder is an important aspect of post-COVID condition - An editorial** 01
HN sarker

ORIGINAL ARTICLE

2 **Effectiveness of Spinal Anesthesia for Appendicectomy** 03
Mahmudul Hasan, Samiran Chandra Nath, Abul Hasnat, Gias Kamal Chowdhury Masum, Abdullah Abbasi

3 **Comparison of Hemodynamic Alteration between Laryngeal Mask Airway and Endotracheal Tube in Intermediate Duration (1 to 2hours) Operations** 10
Mohammad Shahidul Islam, Abdullah Al Maruf, Masudul Alam Mazumder, Aminur Rahman, Sadat Bin Siraj

4 **Laparoscopic Evaluation of Pelvic Organ in Patients of Subfertility** 19
Sabrina Ahmed, Nayema Afroje, Farida Khan, Begum Hosne Ara

5 **The Usefulness of Twinkling Artifact at Color Doppler Ultrasonogram in The Detection of Renal Calculus** 31
SM Sorowar Kamal, Sheikh Rabeya Akter, Borhanuddin, Kaniz Fatema, Mofazzol Sharif, Zerin Haque

6 **The Common Coronary Artery Diseases and Their Risk Factors** 38
Sayem Bin Latif, Prabir Kumar Das, Anisul Awal, Saurav Das, Khondaker Md Ismail, A B K Bashiruddin, Abu Sayem Mohammad Omar Faroque, Debabrata Bhattacharyya, Sawkat Hossan, Partha Bhattacharyya

7 **Risk Factors Associated with Mortality among Tuberculous Meningitis Patients** 45
Kamal Ahmed, Mubin Uddin Akhanji, Shahidul Islam, KM Ahasan Ahmed, Zakirul Islam

8 **Maternal and Fetal Outcome in Preterm Premature Rupture of Membranes** 56
Farjana Maksurat, Ferdousi Sultana, Aklima Khatoon, Ananya Bhattacharjee, Nazneen Choudhury

CamScanner

9 **Early Postoperative Complications following Mastectomy with Level I and II Axillary Dissection** 61
Sadia Siddiky, Sarder Rizwan Nayeem, Syeda Hasina Azam, AHM Shamsul Alam, ABM Mahbubur Rahman

10 **Depression among Primary And or Or Secondary Infertile Women** 76
Nazia Sultana, Priyanka Podder, Nurjahan Begum, Mitra Biswas, Rafiq-Ul Alam

11 **Pathophysiology of CNS Manifestationsin Hepatic Encephalopathy** 84
Abdullah Al-Mamun, SM Mizanur Rahman, Rumana Afrin Sweety

12 **Advantages of Laparoscopic Cholecystectomy over Open Cholecystectomy** 91
Shohidul Islam, Habibun Nobi Md Shafiquzzaman, Ariful Alam Suman, Ashraful Alom, Jamal E Rabby

13 **Incidental Diagnosis of Unplanned Gallbladder Carcinoma During or Following Laparoscopic Cholecystectomy** 101
Shohidul Islam, Habibun Nobi Md Shafiquzzaman, Ariful Alam Suman, Ashraful Alom, Jamal E Rabby

14 **Sociodemographic and Clinical Features of Pregnant Mothers with Normal and Low Albumin Levels** 109
Syma Akter, Erina Tabassum, Salma Khatun, Beauty Begum, Mitra Biswas

15 **Outcomes of Subcutaneous Negative Pressure Drain Closure in Laparotomy Wound of Gastrointestinal Perforation** 116
Tanvir Hasan, ABM Bayezid Hossain, Shaila Parveen, Afroza Ferdous, AKM Fazlay Rabbi Khan, Tasnuva Mahzabeen, Rezwan Shah

16 **Risk Factors Associated with Adolescent Pregnancy and Outcome of Adolescent Pregnancy** 123
Elora Yasmin, Saima Yeasmin Eva, Salma Rouf, Lima Shampa, Rifat Sultana, Qumrun Nessa Ahmed

17 **Feto-Maternal Outcome in Patients of Moderate and Severe Anemia in Pregnancy** 130
Mokaddes Rabbani, Dilraj Banu

18 **Clinical Profile and Feto-Maternal Outcome in Pregnancy with Jaundice** 137
Farjana Sharmin, Zinat Begum, Mist Nurunnahar Khanam, Farhana Ahasan

19 **Sensitivity and Resistant Pattern of Commonly Used Drugs and Outcome of Culture Positive Patients** 148
Mohammad Mashiur Rahman, Mahbubul Hoque, Asma Hoque, Mohhammed Akter Hossan Masud

20 **Bacterial Isolates from Throat and Anterior Nares in Urban, Rural and Slum Areas School Going Children** 157
Mizanur Rahman, Sk Shamim Ahmed, Sharif Chowdhury Rahman, Ismail Hossain Khan, Mst Shamima Akter Banu

CamScanner

21 **Co-morbid General Medical Conditions among Patients with Deliberate Self Harm** 169
Tozammel Hoque, Mst Rokeya Satter, Mozammel Hoque, Saidur Rahman

22 **Socio-demographic Status of Patients with Cervical Intraepithelial Neoplasia 2 and 3 Underwent Loop Electrosurgical Excision Procedure** 176
Tozammel Hoque, Mst Rokeya Satter, Mozammel Hoque, Saidur Rahman

23 **The Prevalence of Different Rheumatic Disease Their Respective Commodities - A Cross Sectional Study** 184
Aminul Alam, Arifur Rahman Chowdhury, Nuzhat Nuery, Mohammed Kamruzzaman, Mahfuzul Alam, Palash Nag

24 **Effect of UST Along with NSAIDS and Exercises in Lateral Epicondylitis** 194
Arifur Rahman Chowdhury, Aminul Alam, Mohammed Kamruzzaman, Nuzhat Nuery, Ripon kumer Saha, Aparajeya Bivab Bikash Baral

25 **Postoperative Recovery and Hospital Stay following Laparoscopic Adrenalectomy for Small and Large Adrenal Tumor** 202
Mohammed Akramul Alam Simon, Aminul Islam Joarder, Zilanur Rahman, Abu Bakar Md Mamun Sharif, Anamul Hoque, Shaila Shagor, Aktar uj-jaman, Raka Mustary

26 **Doppler Ultrasound assessment as a predictor of Preterm Labor in Pregnant Women with Threatened Preterm Labor** 212
Sazeda Khatun, Niksar Akhter, Zenat Rehana, Fariha Rezmin, AA Shafaatullah, Rina Saha

27 **Mental Health Status among Midwives during Covid-19 Pandemic Working in Rohingya Camp** 220
A A Shafaatullah, Injamul Huq, Lubna Rahman, Sharmina Rahman Chowdhury, Rayhan Asif Khan Suvo

28 **Flap coverage in treating traumatic soft tissue defects - observation and outcome** 232
Ayub Ali, AKM Harun-Ar-Rashid, Mohammad Shaha Alam, Mohammad Shah Kamal Uddin, Muhammad Amzad Hussain, Shorif Uz Zaman, Shirin Akter Jahan, Ayesha Begum, Syed Mohammad Sarwar

29 **Impact of Reproductive Trauma on Infertility Related Stress and Quality of Life** 245
Dipu Das, Namita Rani Sinha, Sandip Kanungo, Mahafuz Ul Quaisar, Nila Ahmed

30 **Anxiety before surgery - a cross sectional analysis of major anxieties and factors** 252
Nurul Azim, Mohammad Abdullah Al Mamun, Mohammad Azizul Haque, Ashit Kumar Das

31 **Outcome of Single Layer Extra Mucosal Interrupted Suture in Intestinal Anastomosis** 258
Mohammed Sultan Mahmod, Rezaul Kabir, Joy Zakharia Rab

CamScanner

32 **Cancer Patterns among Adolescents and Young Adults Attending at Different Hospital of Dhaka City** 268
Saidul Haque, Shamsun Naher, Sadia Sharmin, Jamal Uddin

33 **Evaluating the Efficacy of STOSS Therapy in the Management of Nutritional Rickets in Pediatric Patients** 275
Shahnaz Pervin Sumi, Jahangir Alam, Abu Tayab, ASM Nawshad Uddin Ahmed, Shahnoor Islam, Jahid Hasan

34 **Uncovering the Root Causes of Nutritional Rickets in Children** 285
Shahnaz Pervin Sumi, Jahangir Alam, Abu Tayab, ASM Nawshad Uddin Ahmed, Shahnoor Islam, Jahid Hasan

CamScanner

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Original Article

Advantages of Laparoscopic Cholecystectomy over Open Cholecystectomy

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ABSTRACT

Introduction: *Laparoscopic cholecystectomy is the most commonly performed surgical procedure of the digestive tract. It has replaced open cholecystectomy as the gold standard treatment for cholelithiasis and inflammation of the gallbladder. The procedure offers the patient reduced hospital stay, faster return to work, less pain, and improved cosmetic results. This study aimed to analyze the advantage of laparoscopic cholecystectomy over open cholecystectomy.* ***Methods & Material:*** *This prospective study was conducted at the Department of Surgery, Naogaon Medical College, Naogaon, Bangladesh, from July 2015 to June 2017. A total of 100 patients were selected for this study purpose as per inclusion criteria. Statistical analysis of the results was obtained by using Statistical Packages for Social Sciences (SPSS-17) software.* ***Result:*** *In this study, most (30, 30. 0%) of the patients belonged to the age group of 31-40 years, followed by 27 patients (27. 0%) in the group of 41-50 years, 25 patients (25. 0%) in the group of 20-30 years and the rest 18 patients (18. 0%) in the group of 51-60 years of age. The present series showed female predominance for indications of cholecystectomy. Out of 100 study subjects 50 (50. 0%) patients underwent the laparoscopic procedure and 50 (50. 0%) patients underwent the laparotomic procedure. Regarding intra-operative findings, most (26, 26. 0%) of the patients had short cystic duct, followed by empyema in 21 (21. 0%) patients, 17 (17. 0%) patients had intrahepatic gallbladder, 15 (15. 0%) patients experienced*

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mucocele, 12 (12. 0%) patients had contracted gallbladder, and the rest 9 (9. 0%) patients ha bilobed gallbladder. Concerning complications, most (8, 16. 0%) of the patients suffered fro bleeding in the laparotomy group while 3 (6. 0%) patients suffered from bleeding in the laparosco group and were managed by laparoscopic control-laparotomy, followed by 6 (12. 0%) patien experienced surgical site infection in laparotomy group though only 1 (2. 0%) in the laparosco group and were managed by percutaneous drainage, 4 (8. 0%) patients had a hernia in laparoto group while 2 (4. 0%) patients had a hernia in the laparoscopy group and hernia was repaired. 5 (1 0%) patients experienced bile leakage in laparotomy group and 2 (4. 0%) in the laparoscopy grou and were managed by laparotomy-ERCP. However, 2 (4. 0%) patients went through choledoch injury in the laparoscopy group and 1 (2. 0%) in the laparotomy group. In terms of prior abdomin surgery, 18% of patients went through the previous abdominal laparoscopic procedure and 2 underwent a laparotomic procedure. Regarding the comparison of laparoscopy and laparoto procedure, hospital stay was also less (1-2 days) in laparoscopy and more (≥3 days) in laparoto duration of operation was shorter (20-30min) in laparotomy and comparatively longer (30-60 min laparoscopy. Recovery to normal activity was early in laparoscopy and late in laparoto ***Conclusion:*** *This study concluded that in individuals with acute cholecystitis, laparosco cholecystectomy is a legitimate, safe alternative to open cholecystectomy. In comparison to op cholecystectomy, the procedure has a lower risk of problems, suggests a shorter hospital stay, an provides a more comfortable postoperative phase for the patient.*

Keywords: *Laparoscopy, Laparotomy, Cholecystectomy, Gall Bladder*

INTRODUCTION

A systemic endocrine-metabolic response to surgical harm is brought on and is proportional to how stressful the surgery was. When compared to open cholecystectomy, laparoscopic cholecystectomy had a better clinical result, which may mean that there is less risk of surgical trauma.[1] The first laparoscopic cholecystectomy was conducted in 1985 by Prof. Dr. Erich Mühe of Germany. Gynecologists had been using the laparoscope for years for diagnostic procedures before general surgeon Mühe started performing laparoscopic cholecystectomy in 1985.[2] A minimally invasive operation called a laparoscopic cholecystectomy removes the gallbladder through the laparoscope. The reasons for performing this procedure are the same as those for elective standard cholecystectomy, but the patient's choice is crucial to its success. Curre contraindications are changing. Th treatment should not be used on those wh have advanced cholecystitis, abdomin sepsis, ileus, bleeding disorde pregnancy, or morbid obesity.[3] Th patient can anticipate a hospital stay o under two days following a laparoscopi cholecystectomy, and they can return t work in around two weeks. Low at 0 percent, the related surgical mortali rate.[4] Additionally, compared to th group of patients who underwe laparoscopic cholecystectomy, th laparotomic cholecystectomy group ha considerably lower spirometric values an delayed recovery of the breathin parameters. In the laparotomi cholecystectomy group compared to th group undergoing laparoscopi cholecystectomy, the abdomin circumference was substantially larger an

the amount of time required for defecation and peristalsis restoration was significantly longer.[5] Laparoscopic surgery also lessens the chance that the surgical team will become infected with hepatitis B, hepatitis C, or human immunodeficiency viruses.[6] Additionally, intestinal manipulation may impair the mucosal barrier function of the gut and contribute to the systemic inflammatory response seen during open cholecystectomy because the intestine is susceptible to operations at remote locations and the barrier function is altered during intestinal manipulation, resulting in bacterial or endotoxin translocation into the systemic circulation.[7] Additionally, there are notable differences in immunological characteristics between laparoscopic and laparotomic operations. The preservation of immune function in the postoperative phase may play a role in the positive benefits of laparoscopic surgery.[8] According to a study, ESR and CRP values showed that acute-phase reactions were the largest in patients having open cholecystectomy (P0. 02 and P0. 003, respectively). Laparoscopic cholecystectomy patients experienced significantly less pain and analgesic use (P0. 0009 and P0. 0001), which resulted in a shorter hospital stay following the procedure (P0. 0001) for these patients.[9] Infection rates from wounds and pneumonia are lower after laparoscopic cholecystectomy. The approach did not affect the rates of severe hemorrhage or bile leakage.[10] The goal of this study was to compare the benefits of laparoscopic and open cholecystectomy.

OBJECTIVE

General Objective

- To analyze the advantages of laparoscopic cholecystectomy over open cholecystectomy.

Specific Objectives

- To see the intraoperative and postoperative complications of both groups.
- To compare the duration of operation in laparoscopy and laparotomy procedures.
- To compare the duration of hospital stay and recovery to normal activity in the laparoscopic approach.

METHODS & MATERIAL

This prospective study was conducted at the Department of Surgery, Naogaon Medical College, Naogaon, Bangladesh, from July 2015 to June 2017. A total of 100 patients were selected for this study purpose as per inclusion criteria. All subjects underwent proper surgical procedures after obtaining informed written consent. A pre-designed data collection sheet was used to collect data containing the history & physical examination findings of the patient, intraoperative and postoperative complications & follow-up criteria. Statistical analysis of the results was obtained by using Statistical Packages for Social Sciences (SPSS-17) software and the level of significance was measured by using an appropriate procedure like the chi-square test (X^2). All data were kept confidential and used only for this study purpose. Ethical clearance was obtained from the ethics committee of Naogaon Medical College.

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Inclusion Criteria

- Patients between 20-60 years of age.
- Patients indicating cholecystectomy.
- Patients who had given consent to participate in the study.

Exclusion Criteria

- Patients who did not give consent to participate in the study.
- Patients with any chronic disease.

RESULTS

In this study, most (30, 30. 0%) of the patients belonged to the age group of 31-40 years, followed by 27 patients (27. 0%) in the group of 41-50 years, 25 patients (25. 0%) in the group of 20-30 years and the rest 18 patients (18. 0%) in the group of 51-60 years of age. [Table 1] The present series showed female predominance for indications of cholecystectomy. [Figure 1] Out of 100 study subjects 50 (50. 0%) patients underwent the laparoscopic procedure and 50 (50. 0%) patients underwent the laparotomic procedure. [Table 2] Regarding intra-operative findings, most (26, 26. 0%) of the patients had short cystic duct, followed by empyema in 21 (21. 0%) patients, 17 (17. 0%) patients had intrahepatic gallbladder, 15 (15. 0%) patients experienced mucocele, 12 (12. 0%) patients had contracted gallbladder, and the rest 9 (9. 0%) patients had bilobed gallbladder. [Table 3] Concerning complications, most (8, 16. 0%) of the patients suffered from bleeding in the laparotomy group while 3 (6. 0%) patients suffered from bleeding in the laparoscopy group and were managed by laparoscopic control-laparotomy, followed by 6 (12. 0%) patients experienced surgical site infection in laparotomy group though only 1 (2. 0%) in the laparoscopy group and were managed by percutaneous drainage. 4 (8. 0%) patients had a hernia in laparotomy group while 2 (4. 0%) patient had a hernia in the laparoscopy group and hernia was repaired, 5 (10. 0%) patients experienced bile leakage in laparotomy group and 2 (4. 0%) in the laparoscopy group and were managed by laparotomy ERCP. However, 2 (4. 0%) patients went through choledochal injury in the laparoscopy group and 1 (2. 0%) in the laparotomy group. [Table 4] In terms of prior abdominal surgery, 18% of patients went through the previous abdominal laparoscopic procedure and 20% underwent a laparotomic procedure [Figure 2] Regarding the comparison of laparoscopy and laparotomy procedure, hospital stay was also less (1-2 days) in laparoscopy and more (≥3 days) in laparotomy, duration of operation was shorter (20-30min) in laparotomy and comparatively longer (30-60 min) in laparoscopy. [Table 5] Recovery to normal activity was early in laparoscopy and late in laparotomy. [Figure 3]

Table 1: Distribution ofsubjects according to age. (N=100)

Age (years)	N	%
20-30	25	25. 0
31-40	30	30. 0
41-50	27	27. 0
51-60	18	18. 0

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Figure 1: Distribution of respondents according to sex. (N=100)

Table 2: Type of approach done on respondents in this study (N=100)

Operation	N	%
Laparoscopy	50	50. 0
Laparotomy	50	50. 0

Table 3: Distribution of respondents according to intra-operative findings. (N=100)

Intra-operative findings	N	%
Contracted GB	12	12. 0
Mucocele	15	15. 0
Empyema	21	21. 0
Short cystic duct	26	26. 0
Intrahepatic gall bladder	17	17. 0
Bilobed gall bladder	9	9. 0

Table 4: Distribution of respondents according to complications. (N=100)

Complications	Laparoscopy n=50 (%)	Laparotomy n=50 (%)	Management
Choledochal injury	2 (4. 0)	1 (2. 0)	Laparotomy
Bile leakage	2 (4. 0)	5 (10. 0)	Laparotomy-ERCP
Surgical site infection	1 (2. 0)	6 (12. 0)	Percutaneous drainage
Hernia	2 (4. 0)	4 (8. 0)	Hernia repair
Bleeding	4 (8. 0)	8 (16. 0)	Laparoscopic control-laparotomy

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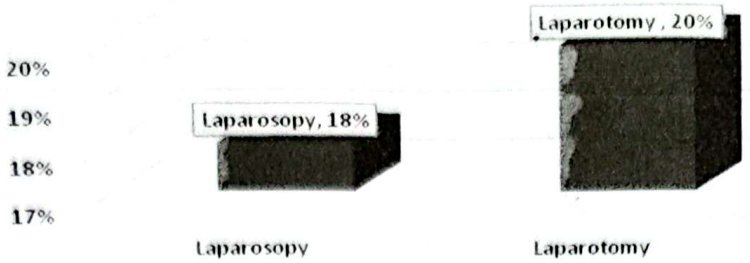


Figure 2: H/O prior surgery of study subjects (N=100)

Table 5: Comparison of laparoscopy and laparotomy procedure (N=100)

Traits	Laparoscopy (n=50)	Laparotomy (n=50)
Hospital stay (day)	1-2	≥3
Duration of operation (min)	30-60	20-30

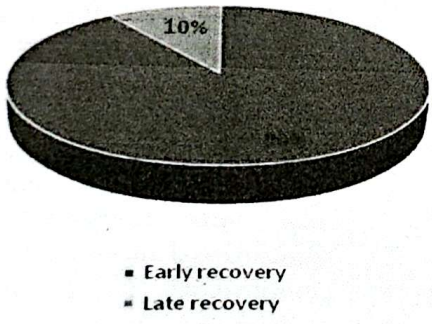


Figure 3: Recovery to normal activity in the laparoscopic approach (N=100)

DISCUSSION

Laparoscopic cholecystectomy is the method of choicefor the treatment of symptomatic gallstone disease. Although there are many documented advant oflaparoscopic surgery in different stud there arestill concerns about its poss complications. However,in comparison open surgery, laparoscopic surg accounts for less morbidity mortality.[11] In this study, most (30. 0%) of the patients belonged to the group of 31-40 years, followed by patients (27. 0%) in the group of 41 years, 25 patients (25. 0%) in the grou 20-30 years and the rest 18 patients 0%) in the group of 51-60 years of The present series showed fe predominance for indications cholecystectomy which was quite relat to other studies.[12],[13] Regarding i operative findings, most (26, 26. 0%) the patients had short cystic duct, follo by empyema in 21 (21. 0%) patients, (17. 0%) patients had intrahep gallbladder, 15 (15. 0%) pat experienced mucocele, 12 (12. patients had contracted gallbladder, the rest 9 (9. 0%) patients had bil gallbladder which was quite simila another study.[14] Concer complications, most (20, 40. 0%) of patients suffered from bleeding in laparotomy group while 4 (8. 0%) pat suffered from bleeding in the laparot group and were managed by laparos

[illegible] laparotomy followed by 15 (30. [illegible] patients experienced surgical site [illegible]tion in laparotomy group though only [illegible] 0%) in the laparoscopy group and [illegible] managed by percutaneous drainage, [illegible] (4. 0%) patients had a hernia in [illegible]rotomy group while 2 (4. 0%) patients [illegible] a hernia in the laparoscopy group and [illegible] hernia was repaired, 10 (20. 0%) [illegible]ents experienced bile leakage in [illegible]rotomy group and 2 (4. 0%) in the [illegible]roscopy group and were managed by [illegible]rotomy-ERCP. However, 2 (4. 0%) [illegible]ents went through choledochal injury [illegible] the laparoscopy group and 1 (2. 0%) in [illegible] laparotomy group. In another [illegible]stigation, bile leakage affected 18 [illegible]ents (3. 6%), hernias at the incision site [illegible]plicated 6 patients (1. 2%), and [illegible]rotomies were necessary for 15 [illegible]ents (3. 0%). Surgical site bleeding and [illegible]gical site infection were observed [illegible]pectively in 11 patients (2. 2%) and 17 [illegible]ents (3. 4%). 52 patients (10. 4%) had [illegible]gically-induced complications.[15] [illegible]garding the comparison of laparoscopy [illegible] laparotomy procedures, total blood [illegible] was less (30-50ml) in laparoscopy and [illegible] (>60ml) in the laparotomy [illegible]edure. The length of the surgery was [illegible]ter (20-30min) in laparotomy and [illegible]parably longer (30-60min) in [illegible]roscopy. The hospital stay was [illegible]rwise shorter (1-2 days) in laparoscopy [illegible] longer (3 days) in laparotomy. [illegible]ding to another study, the median [illegible] to resume full activity after discharge [illegible] 11 days, while the median hospital [illegible] following the laparoscopic procedure [illegible] 3 days.[16] According to the current [illegible]y, laparoscopic cholecystectomy [illegible]ted in a shorter hospital stay than [illegible]tomic cholecystectomy, which resulted in a longer hospital stay.[17] This method's benefits include less scarring, less incisional discomfort, a shorter hospital stay, and a quicker return to function.[18] Furthermore, this study demonstrated that returning to normal activities occurred sooner after laparoscopy and later after laparotomy, which was also demonstrated by another author.[19] The same findings are reached by extensive multicenter research, such as those recently carried out in France and Belgium with 3,708 patients. The laparoscopic cholecystectomy procedure is most likely the best treatment option for gallbladder lithiasis. It serves as the first practical step toward contemporary surgical techniques.[20]

LIMITATIONS OF THE STUDY

The study was conducted in a single hospital with a small sample size. So, the results may not represent the whole community.

CONCLUSION

This study concluded that in individuals with acute cholecystitis, laparoscopic cholecystectomy is a legitimate, safe alternative to open cholecystectomy. In comparison to open cholecystectomy, the procedure has a lower risk of problems, suggests a shorter hospital stay, and provides a more comfortable postoperative phase for the patient.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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RECOMMENDATION

The goal of any cholecystectomy, whether laparoscopic or open, is the safe removal of the gallbladder while avoiding injury to the CBD at all costs thus. Due to several advantages, laparoscopic cholecystectomy is recommended. However, further studies with a large sample size involving multiple centers should be conducted to combat minor challenges in this regard.

REFERENCES

1. *Karayiannakis AJ, Makri GG, Mantzioka A, Karousos D, Karatzas G. Systemic stress response after laparoscopic or open cholecystectomy: a randomized trial. Journal of British Surgery. 1997 Apr;84(4):467-71.*
2. *Reynolds Jr W. The first laparoscopic cholecystectomy. JSLS: Journal of the Society of Laparoendoscopic Surgeons. 2001 Jan;5(1):89.*
3. *Gadacz TR, Talamini MA. Traditional versus laparoscopic cholecystectomy. The American journal of surgery. 1991 Mar 1;161(3):336-8.*
4. *Macintyre IM, Wilson RG. Laparoscopic cholecystectomy. British journal of surgery. 1993 May;80(5):552-9.*
5. *Mimica Ž, Biočić M, Bačić A, Banović I, Tocilj J, Radonić V, Ilić N, Petričević A. Laparoscopic and laparotomic cholecystectomy: a randomized trial comparing postoperative respiratory function. Respiration. 2000;67(2):153-8.*
6. *Morino M, Cavuoti G, Miglietta C, Giraudo G, Simone P. Laparoscopic cholecystectomy in cirrhosis: contraindication or privileged indication?.Surgical Laparoscopy Endoscopy & Percutaneous Techniques. 2000 Dec 1;10(6):360-3.*
7. *Schietroma M, Cappelli S, Carlei F, Di Giuro G, Agnifili A, Recchia CL, Antonellis M, Amicucci G. Intestinal and systemic endotoxaemia after laparotomic or laparoscopic cholecystectomy. Chirurgiaitaliana. 2006 Mar 1;58(2):171-7.*
8. *Redmond HP, Watson RW, Houghton T Condron C, Watson RG, Bouchier-Hay D. Immune function in patients undergoing open vs laparoscopic cholecystectomy. Archives of Surgery 1994 Dec 1;129(12):1240-6.*
9. *Mealy K, Gallagher H, Barry M, Lenn F, Traynor O, Hyland J. Physiological and metabolic responses to open and laparoscopic cholecystectomy. British Journal of surgery. 1992 Oct;79(10):1061-4.*
10. *Coccolini F, Catena F, Pisano M, Gh F, Fagiuoli S, Di Saverio S, Leandro G Montori G, Ceresoli M, Corbella D, Sartelli M. Open versus laparoscopic cholecystectomy in acute cholecystitis Systematic review and meta-analysis International journal of surgery. 2015 1;18:196-204.*
11. *Zacks SL, Sandler RS, Rutledge R, Br Jr RS. A population-based cohort study comparing laparoscopic cholecystectom and open cholecystectomy. The Americ journal of gastroenterology. 2002 Feb 1;97(2):334-40.*
12. *Gabriel R, Kumar S, Shrestha A. Evaluation of predictive factors for conversion of laparoscopic cholecystectomy. Kathmandu university medical journal. 2009;7(1):26-30.*
13. *Rohatgi A, Singh KK. Mirizzi syndrome laparoscopic management by subtotal cholecystectomy. Surgical Endoscopy & Other Interventional Techniques. 2006 Sep;20(9):1477-81.*
14. *Hela AH, Khandwaw HM, Kumar R, Samad MA. Experience of Laparoscopic Cholecystectomies in a Tertiary Care Hospital: a Retrospective Study. Gali medical journal. 2020 Dec 26;27(4):E202043-.*
15. *RAJABI MM, Abdollahi A, Tavassoli A Forghani MN, Shabahang H, Keykho E, JABBARI NA, Rezaei R. Laparoscop Cholecystectomy: A Retrospective Fou Year Study.*
16. *Cuschieri A, Dubois F, Mouiel J, Mo P, Becker H, Buess G, Trede M, Trou The European experience with laparoscopic cholecystectomy. The*

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American journal of surgery. 1991 Mar 1;161(3):385-7.

17. Wolf AS, Nijsse BA, Sokal SM, Chang Y, Berger DL. Surgical outcomes of open cholecystectomy in the laparoscopic era. The American journal of surgery. 2009 Jun 1;197(6):781-4.
18. Novitsky YW, Kercher KW, Czerniach DR, Kaban GK, Khera S, Gallagher-Dorval KA, Callery MP, Litwin DE, Kelly JJ. Advantages of mini-laparoscopic vs conventional laparoscopic cholecystectomy: results of a prospective randomized trial. Archives of Surgery. 2005 Dec 1;140(12):1178-83.
19. Dubois F, Icard P, Berthelot GA, Levard H. Coelioscopic cholecystectomy. Preliminary report of 36 cases. Annals of Surgery. 1990 Jan;211(1):60.
20. Perissat J, Collet D, Belliard R, Desplantez J, Magne E. Laparoscopic cholecystectomy: the state of the art. A report on 700 consecutive cases. World journal of surgery. 1992 Nov;16(6):1074-82.

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