CODEN [USA]: IAJPBB ISSN : 2349-7750

INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES

SJIF Impact Factor: 7.187
http://doi.org/10.5281/zenodo.4014119

Available online at: http://www.iajps.com *Research Article*

RESULTS OF LAPAROSCOPIC CHOLECYSTECTOMY IN THE ELDERLY AND YOUNG PATIENTS

[1]Dr Syed Muhammad Ali, [2]Dr Zeeshan Zameer, [3]Dr Aleesha Sarfraz

[1]Nishtar Medical University, Multan, [2]Sheikh Zayed Medical College, Rahim Yar Khan, [3]Wah Medical College, Wah Cantt.

Article Received: July 2020 **Accepted:** August 2020 **Published:** September 2020

Abstract:

Aim: *to understand the results of laparoscopic cholecystectomy in older patients compared to young patients.*

Material and methods: *The study was conducted in the general surgery department of Nishtar Hospital, Multan for one-year duration from May 2019 to May 2020. We divided the patients into 2 groups according to their age, ie under and over 60 years of age. The age, gender, type of surgery and conversion rate of both groups were analyzed and recorded.*

Results: *A total of 200 patients underwent cholecystectomy for chronic cholelithiasis in the general surgery department were selected. These 200 patients were divided into 2 groups according to their age. Group 1 included 140 patients aged 60 years. In each group, the majority of patients were female. All patients passed over their knees. cholecystectomy.*

Conclusion: *The conclusion is that although laparoscopic cholecystectomy is performed more frequently in younger patients, age is not an important factor for both conversion and incidence; therefore, laparoscopic surgery can be safely performed in elderly patients.*

Key words: *shank, the elderly, gallstone disease*

Corresponding author:

Dr. Syed Muhammad Ali,

Nishtar Medical University, Multan..

QR code

Please cite this article in press Syed Muhammad Ali et al, ***Results Of Laparoscopic Cholecystectomy In The Elderly And Young Patients.,*** *Indo Am. J. P. Sci, 2020; 07(09).*

INTRODUCTION:

The gold standard in the treatment of gallstones, currently lasting several days, is laparoscopic cholecystectomy. Laparoscopic cholecystectomy is better than open cholecystectomy and is very well documented, but the procedure is associated with a high frequency of biliary damage. Currently, the first choice of treatment for gallbladder removal in elderly patients is laparoscopic cholecystectomy, especially before the development of complications such as acute cholecystitis or the formation of dense adhesions from chronic cholecystitis, but the safety of this procedure in older patients is still questioned in some studies. This study was conducted to compare the results of laparoscopic cholecystectomy in young patients (<60 years) with elderly patients (> 60 years)

MATERIALS AND METHODS:

This study was a randomized, controlled study that assessed the results of laparoscopic cholecystectomy performed in elderly patients v / s. The study was conducted in the general surgery department of Nishtar Hospital, Multan for one-year duration from May 2019 to May 2020. A total of 200 patients of both sexes aged 15 to 70 years with cholelithiasis visible on ultrasound in the surgical outpatient department were included. Patients with acute cholecystitis, multiple gallbladder cancer abdominal surgery, multiple comorbidities, obstructive jaundice, dilatation of the common bile duct, acute pancreatitis, stones / mass of the common bile duct or requiring intraoperative fluorochlangiography / common bile duct examination were excluded from the study. research. Patients requiring conversion from laparoscopic to open cholecystectomy for any of the above reasons were also excluded. Patients under the age of 15 or over 70 will be excluded from the study. These 200 patients were divided into 2 groups according to their age. Group 1 consisted of 140 patients aged <60 years, while group 2 consisted of 60 patients aged> 60 years. SPSS version 17 was used for data analysis.

RESULTS:

A total of 200 patients underwent cholecystectomy for chronic gallstone disease were selected. These 200 patients were divided into 2 age groups. Group 1 consisted of 140 patients aged <60 years, while group 2 consisted of 60 patients aged> 60 years. In each group, the majority of patients were women who underwent laparoscopic cholecystectomy (Table 1).

Table 1: Indications for laparoscopic cholecystectomy

Indications	**=n**	**%age**
Chronic cholecystitis	117	58.5
Repeated attacks of biliary colic	50	25
Cholelithiasis (patient's wish)	23	11.5
Acute cholecystitis	10	5

Table 2: Postoperative complications

Complications	**Group <60 yrs of age (n=140)**	**Group >60 yrs of age (n=60)**
Port site infection	10(7.1 %)	2(3.3%)
Minor bile leak	5(3.6%)	1(1.6%)
Intraperitoneal collection	6(4.3%)	2(3.3%)
Pulmonary problems (basal atelectasis, pneumonia, pleural effusion etc.)	5(3.6%)	8(13.3%)

After cholecystectomy, the patients stayed in the hospital for one day. Some patients required longer hospital stays due to postoperative complications. All these complications were treated conservatively, in some cases antibiotics (intravenously) were administered, but these patients did not require surgery. All these postoperative complications are presented in the table below, together with the percentage of patients in both groups, who experienced these complications. Many of the 200 patients who came to us with gallstone disease also had other conditions. All of these comorbidities and the total number of patients with them are discussed in Table 3 below. Of these 200 patients, 17 went from laparoscopic cholecystectomy to open-label cholecystectomy (Table 4).

Table 3: Co morbid conditions

Co morbid	**Group <60 yrs of age(n=140)**	**Group >60 yrs of age (n=60)**

Hypertension	13(9.3%)	10(16.7%)
Diabetes mellitus	7 (5%)	8(5.7%)
COPD	0	5(3.57%)
Hepatitis C	15(10.7%)	5(3.57%)
Hepatitis B	5(3.6%)	2(1.43%)

Table 4: Factors responsible for conversion of laparoscopic cholecystectomy to open cholecystectomy

Factors	**Group <60 yrs of age (n=140)**	**Group >60 yrs of age (n=60)**
Difficult anatomy	6(4.3%)	2(3.3%)
Bleeding (intraoperative)	2(1.4%)	2(3.3%)
Adhesions due to previous surgery	4(2.8%)	1(1.7%)
Total	12(8.5%)	5(8.3%)

DISCUSSION:

After the introduction of laparoscopic cholecystectomy, there has been a dramatic change in the treatment of gallstone disease. Complications of gallstone disease are also more common in older patients. Shorter hospital stays, early return to daily activities, and fewer physiological dysfunctions were factors that made laparoscopic cholecystectomy an acceptable and popular method of gallbladder removal. The above-mentioned benefits of laparoscopic cholecystectomy make this procedure an acceptable option for the elderly, suffering from many other comorbidities that sometimes make surgery difficult and dangerous for them. The associated comorbidities of the patients included in our study are quite similar to some other international studies. Some international studies have found that the incidence of acute cholecystitis is higher in elderly patients, but according to our study results, only 10 patients had acute cholecystitis and only 3 of them were> 60 years old. The factors responsible for the conversion from laparoscopic to open cholecystectomy are discussed in Table 3. It is clear that the conversion rate in elderly patients (> 60 years) was 8.3%. This finding is quite similar to other international studies that range from 5% to 25%. According to this study, the conversion rate for young patients was 8.5%. According to the available international literature, increased age of patients is also an important risk factor for the conversion of laparoscopic cholecystectomy to the open method. This can be attributed to a longer history of gallstone disease in the elderly and an increased number of attacks of acute cholecystitis. Reduced morbidity and mortality are the reasons why the laparoscopic approach is preferred in older patients over the open approach to gallbladder removal. This is evidenced by reports that in some international studies the incidence of open cholecystectomy in the elderly is 23–28%, and the mortality rate is 1.5–2%. In laparoscopic cholecystectomy in the elderly, the reported incidence is 5-15%, and mortality 0-1%. There was no mortality in our study. Cholecystectomies are very difficult to perform in men, but our study did not confirm this fact. Laparoscopic surgery is now considered a more feasible and reliable technique for elderly patients.

CONCLUSION:

Although laparoscopic cholecystectomy is performed more frequently in younger patients, age is not an important factor for both conversion and morbidity; therefore, laparoscopic surgery can be safely performed in elderly patients.

REFERENCES:

1. Yokota, Yuki, Yoshito Tomimaru, Kozo Noguchi, Takehiro Noda, Hisanori Hatano, Hirotsugu Nagase, Atsushi Hamabe et al. "Surgical outcomes of laparoscopic cholecystectomy for acute cholecystitis in elderly patients." *Asian journal of endoscopic surgery* 12, no. 2 (2019): 157-161.
2. Kamarajah, Sivesh K., Santhosh Karri, James R. Bundred, Richard PT Evans, Aaron Lin, Tania Kew, Chinenye Ekeozor, Susan L. Powell, Pritam Singh, and Ewen A. Griffiths. "Perioperative outcomes after laparoscopic cholecystectomy in elderly patients: a systematic review and meta-analysis." *Surgical Endoscopy* (2020): 1-14.
3. Lord, Amy C., Georgina Hicks, Belinda Pearce, Lulu Tanno, and P. H. Pucher. "Safety and outcomes of laparoscopic cholecystectomy in the extremely elderly: a systematic review and meta-analysis." *Acta Chirurgica Belgica* 119, no. 6 (2019): 349-356.
4. Ninomiya, Shigeo, Shota Amano, Tadashi Ogawa, Yoshitake Ueda, Norio Shiraishi, Masafumi Inomata, and Katsuhiro Shimoda. "The impact of dementia on surgical outcomes of laparoscopic cholecystectomy for symptomatic

cholelithiasis and acute cholecystitis: A retrospective study." *Asian journal of endoscopic surgery* 13, no. 3 (2020): 351-358.

5. Kim, Suhyun, Namkyu Choi, Minho Shin, and Daesik Jung. "Clinical Safety of Laparoscopic Cholecystectomy in Elderly Patients: A Comparison of Clinical Outcomes in Patients Aged 65 to 79 Years and over 80 Years." *Journal of Acute Care Surgery* 10, no. 1 (2020): 1-4.
6. Badawy, Amr, Satoru Seo, Rei Toda, Hiroaki Fuji, Ken Fukumitsu, Takamichi Ishii, Kojiro Taura, Toshimi Kaido, and Shinji Uemoto. "A propensity score-based analysis of laparoscopic liver resection for liver malignancies in elderly patients." *Journal of Investigative Surgery* 32, no. 1 (2019): 75-82.
7. Ayub, Shamaila, Aun Ali, Umair-ul-Islam Ata-ur-Rehman, and Aqeel Jawaid. "Laparoscopic Cholecystectomy in septuagenarians and above: a comparative analysis from Pakistani population." *Pak J Surg* 35, no. 2 (2019): 98-101.
8. Arslan, Baha, Tuğbahan YILMAZ, Varlık EROL, Bahattin Tuncali, and Hüseyin GÜLAY. "CAN CHOLECYSTECTOMY BE PERFORMED AS SAFELY IN ELDERLY PATIENTS AS IT IS IN YOUNG PATIENTS?." *Turkish Journal of Geriatrics/Türk Geriatri Dergisi* 23, no. 1 (2020).
9. Zhou, Yong, Wen-Zhang Zha, Ren-Gen Fan, Guo-Qin Jiang, and Xu-Dong Wu. "Two-stage versus single-stage procedure for the management of cholecystocholedocholithiasis in elderly patients: a retrospectively cohort study." *Rev Esp Enferm Dig* 111, no. 3 (2019): 176-81.
10. Santos, Marcelo Protásio dos, José Eduardo Gonçalves, André Akira Ramos Takahashi, Bruno Barros Britto, Fernando Bray Beraldo, Jaques Waisberg, and Luciana Kase Tanno. "Safety and effectiveness of laparoscopic Y-en-Roux gastric bypass surgery in obese elderly patients." *Acta Cirurgica Brasileira* 35, no. 6 (2020).
11. Bray, F., T. Balcaen, E. Baro, A. Gandon, G. Ficheur, and E. Chazard. "Increased incidence of cholecystectomy related to gallbladder disease in France: Analysis of 807,307 cholecystectomy procedures over a period of seven years." *Journal of visceral surgery* 156, no. 3 (2019): 209-215.
12. Abdi, Irfan Haider, Rehana Firdos, Qambar Ali Laghari, Naimatullah Kalhoro, and Sikander Munir Memon. "Role of laparoscopic cholecystectomy in Geriatric patients (> 60 years of age)." *The Professional Medical Journal* 27, no. 01 (2020): 62-67.
13. Qu, Qiang, Weijie Chen, Xiao Liu, Wenda Wang, Tao Hong, Wei Liu, and Xiaodong He. "Role of gallbladder-preserving surgery in the treatment of gallstone diseases in young and middle-aged patients in China: results of a 10-year prospective study." *Surgery* 167, no. 2 (2020): 283-289.
14. Feldman, Itamar, Lena Feldman, Dvorah S. Shapiro, Gabriel Munter, Amos M. Yinnon, and Reuven Friedman. "Characteristics and outcome of elderly patients admitted for acute Cholecystitis to medical or surgical wards." *Israel Journal of Health Policy Research* 9, no. 1 (2020): 1-7.
15. Musbahi, A., P. Abdulhannan, J. Bhatti, R. Dhar, M. Rao, and B. Gopinath. "Outcomes and risk factors of cholecystectomy in high risk patients: A case series." *Annals of Medicine and Surgery* 50 (2020): 35-40.