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Surgery

CLINICAL OUTCOME OF LAPAROSCOPIC CHOLECYSTECTOMY IN ELDERLY PATIENTS

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ABSTRACT

AIM- We aimed to evaluate the results of LC in elderly patients.

METHOD- It's a retrospective study conducted at Teerthanker Mahaveer Medical College & Research Center, Moradabad. Record of all patients who had undergone LC from Jan 2015 to Dec 2016 were retrieved & reviewed. 310 patients were included in study and were divided into two groups out of which 216 belonged to group A aged < 69 years & 94 belonged to group B aged >70 years subjected to LC on elective list.

RESULT- Out of 310 patients, 216 (69. 67%) belonged to group A and 94 (38.3%) belonged to group B. In our study there is no statistically significant difference between the 2 groups in terms of conversion. Postoperative complication rates were 5.8% in patients <69 and 7.4% in patients >70; however, this difference was also not statistically significant. Mean hospital stay was 1.49±1.21 days in the group A and 2.60±1.84 in group B, which was statistically significant (P<0.01)

CONCLUSION- We concluded that laparoscopic cholecystectomy in elderly (>70years) patients is an unfailing approach that allows patients the benefits of minimally invasive surgery without further rising the risks of surgical procedure.

KEYWORDS : Laparoscopic Cholecystectomy, Elderly, Conversion rate, Length of Hospital stay

INTRODUCTION –

Longer life expectancies together with a higher incidence of gallbladder stones increasing in conjunction with increasing age has resulted in a greater number of elderly patients being operated on today for symptomatic gallbladder stones.[1]The prevalence of gallstones increases with age in both sexes and in nearly all populations; in older individuals the prevalence ranges from 20% to 30% and increases to 80% for institutionalized patients older than 90 years [2-4]. Although laparoscopic cholecystectomy has become the gold standard for the treatment of gallbladder stones, its safety in elderly patients is still questioned.[5-7] Our study aimed to assess the outcome of laparoscopic cholecystectomy in patients aged 70 years and older.

METHOD -

It's a retrospective study conducted at Teerthanker Mahaveer Medical College & Research Center, Moradabad. Record of all patients who had undergone LC from Jan 2015 to Dec 2016 were retrieved & reviewed. 310 patients were included in study and were divided into two groups out of which 216 belonged to group A aged < 69 years & 94 belonged to group B aged >70 years subjected to LC on elective list. The following patient data were recorded: age, gender, indication for surgery, conversion to open surgery, postoperative length of hospital stay, morbidity, and mortality due to surgery.

RESULTS-

Out of 310 patients, 216 (69. 67%) belonged to group A and 94 (38.3%) belonged to group B.(Table1)

Table1:

S.No	GROUP	AGE	NUMBER	PERCENTAGE
1.	A	<69YEARS	216	69.67%
2.	B	>70YEARS	94	38.3%

Out of 310 patients, The proportion of females in group A and group B was 69.5% and 74.07% respectively and similarly proportion of males in group A and B was 31.25% and 25.92%respectively.(Table2)

Table2:

GENDER	TOTAL		GROUP A		GROUP B	
	NO	%	NO	%	NO	%
FEMALE	256	82.58%	176	69.53%	80	31.25%
MALE	54	17.4%	40	74.07%	14	25.92%

Difference in conversion rate between group A & group B undergoing LC.(Table3)

Table3:

CONVERSION TO OPEN	TOTAL		GROUP A		GROUP B	
	NO	%	NO	%	NO	%
COMMON HEPATIC DUCT INJURY	11	3.5%	08	3.7%	04	4.2%
CYSTIC ARTERY BLEEDING	05	1.6%	03	1.3%	02	2.1%
DIFFICULT ANATOMY	08	2.5%	06	2.7%	02	2.1%
CONVERSION RATE	24	7.7%	17	7.8%	08	8.5%

In our study there is no statistically significant difference between the 2 groups in terms of conversion. In groupA - 17(7.8%) required conversion: 3 because of bleeding & 8 because of bile duct injury and 6 because of difficulties encountered in dissecting the Callot's triangle. In group B - 08(8.5%) required conversion: 4 because of bile duct injury, 2 because of bleeding & 2because of difficulties encountered in dissecting Callot's triangle.

Postoperative complication rates were 5.8% in patients <69 and 7.4% in patients >70; however, this difference was not statistically significant.

Table4:

POST OP HOSPITAL STAY	TOTAL		GROUP A		GROUP B	
	NO	%	NO	%	NO	%
<2days	186	60%	126	58.3%	60	63.8%
>2days	124	40%	90	41.6%	34	36.17%

58.3% patients in group A had post operative stay in hospital less than 2 days while 41.6% had post operative stay more than 2 days similarly 63.8% had post operative stay less than 2 days in group B and 36.17% had post operative stay more than 2 days(Table4). Mean hospital stay was 1.49±1.21 days in the group A and 2.60±1.84 in group B, which was statistically significant (P<0.01). No deaths occurred in either group.

DISCUSSION-

Many studies have demonstrated the applicability and advantages of the laparoscopic cholecystectomy also in the geriatric population with low rates of morbidity and mortality. Though the age of patients is a factor that has worried surgeons. However, this variable alone is not able to preclude laparoscopy[8]. The aim of LC in elderly is to provide them with the best possible quality of life with the lowest physiological cost. Many studies in literature have shown that most elderly patients undergoing LC do well, but when compared with younger patients, the elderly have higher rates of conversion to open, somewhat longer postoperative stays, and more complications[9,10]

In our study the patients were predominantly female and overall percentage was found to be 82.5% and this is in accordance with others studies in literature.

The conversion rate of 8.5% was observed in patients>70 years of age in our work which is within the limit of the variation of 2% to 26.5% found in other peoples work in the literature.[10-14.]

Although in our study the complication rates were slightly higher in the group aged 70 or older compared with the younger group of patients (7.4% vs 5.8%,), these figures are still lower than the reported complication rates for open cholecystectomy. Complication rate in elderly is in accordance with the study of Hazzan et al[15]. and Sang III Lee et al[16]. As elderly patients frequently suffer from significant comorbid diseases and limited cardiopulmonary reserves that may contribute to a complicated perioperative course and increase postoperative complications rate.

In our work, although the length of hospital stay was shorter in both groups compared with that in open cholecystectomy, it was significantly longer in the group B compared with that in group A. These outcomes made us consider that elderly patients also benefited from the shorter hospital stay offered by the laparoscopic technique.

CONCLUSION-

Based on the results of our study, we concluded that laparoscopic cholecystectomy in elderly (>70years) patients is an unfailing approach that allows patients the benefits of minimally invasive surgery without further rising the risks of surgical procedure.

CONFLICTS OF INTEREST-

No potential conflict of interest relevant to this article was reported.

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