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RETROSPECTIVE STUDY ON OUTCOME OF LAPAROSCOPIC CHOLECYSTECTOMY IN THE ELDERLY AT JSS HOSPITAL, MYSURU

General Surgery

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ABSTRACT

(a) Laparoscopic cholecystectomy is a widely performed surgery in India and across the world for a wide range of indications. It is one of the most commonly performed surgeries, and hence a study based on outcomes of Laparoscopic cholecystectomy in the elderly would go a long way in determining the safety and success of Laparoscopic cholecystectomy in the elderly, and could help in timing surgery more effectively to avoid complications and difficulties.

(b) Materials and methods: Out of 250 patients who underwent Laparoscopic Cholecystectomy at JSS Hospital in the period starting January 2019 onwards who were selected by randomization, 65 patients fit the criteria (age > 60 years) while 185 patients were aged <60. Data regarding comorbidities, duration of surgery, duration of hospital stay, conversion to open cholecystectomy was compiled and studied.

(c) Results: A significant number of the patients in the elderly age group had associated comorbidities. Duration of surgery was prolonged by a mean duration of 9.5 minutes in the elderly. Duration of hospital stay was increased by a mean of 2.2 days in the elderly. Incidence of conversion to open cholecystectomy was also higher in the elderly.

(d) Conclusions: Laparoscopic cholecystectomy is a relatively safe and easy surgery with few complications. However, one may experience difficulties while operating on the elderly, viz. Adhesions, contracted gall bladder with hepatic adhesions etc., Which may result in longer duration of surgery and higher rates of conversion to open cholecystectomy.

KEYWORDS

Cholecystectomy; Laparoscopic cholecystectomy; elderly

INTRODUCTION:

Laparoscopic cholecystectomy is a widely performed surgery in India and across the world for a wide range of indications. It is one of the most commonly performed surgeries, and hence a study based on outcomes of Laparoscopic cholecystectomy in the elderly would go a long way in determining the safety and success of Laparoscopic cholecystectomy in the elderly, and could help in timing surgery more effectively to avoid complications and difficulties, [1][2] while preventing or reducing the incidence of conversion to open cholecystectomy, which is associated with longer postoperative recovery periods and cardiovascular as well as respiratory complications. [8][4][5]

AIMS AND OBJECTIVES:

To study the outcomes of Laparoscopic Cholecystectomy in the elderly (age > 60 years) using various parameters, viz. duration of surgery, duration of hospital stay and conversion to open cholecystectomy.

MATERIALS AND METHOD:

Out of 250 patients who underwent Laparoscopic Cholecystectomy at JSS Hospital in the period starting January 2019 onwards who were selected by randomization, 65 patients fit the criteria (age > 60 years) while 185 patients were aged <60.

Data regarding comorbidities, duration of surgery, duration of hospital stay, conversion to open cholecystectomy was compiled and studied.

(a) INCLUSION CRITERIA:

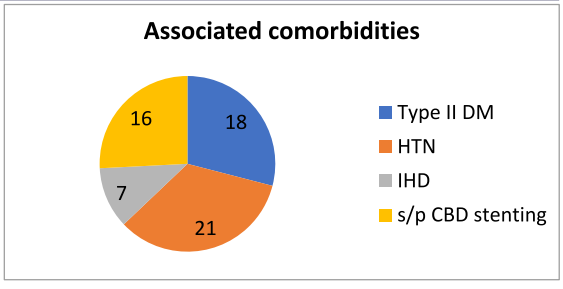
250 patients who underwent Laparoscopic cholecystectomy were randomly selected and studied, irrespective of age, gender, comorbidities. Those undergoing cholecystectomy for benign causes were included.

(b) EXCLUSION CRITERIA:

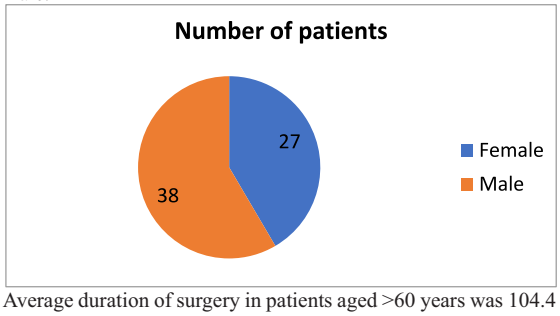
Any patient undergoing open cholecystectomy, open CBD exploration, or cholecystectomy for malignancy.

RESULTS:

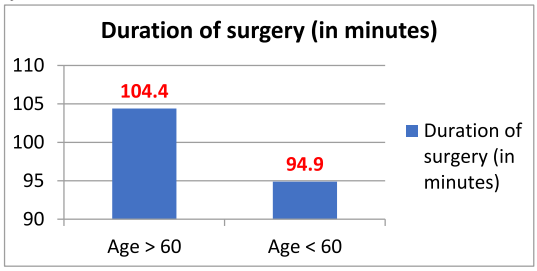
- 18 out of 65 patients (27.69%) aged >60 had Type II Diabetes Mellitus, 21 patients (32.3%) had Hypertension, 7 (10.7%) had Ischemic Heart Disease, and 16 patients (24.6%) had undergone CBD stenting for Choledocholithiasis prior to surgery.



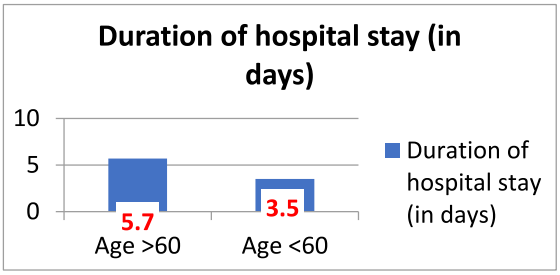
- Out of 65 patients aged >60, 27 were female and 38 (58.4%) were male.



- Average duration of surgery in patients aged >60 years was 104.4 minutes, which was **9.5 minutes longer** than in patients aged <60 years.



- The average duration of hospital stay was prolonged in patients aged >60 years by an average of 2.2 days.



- A total of 6 out of 65 patients aged >60 (9.23%) underwent Laparoscopic converted to open cholecystectomy due to intraoperative complications, in comparison to 4 out of 185 (2.16%) aged <60 who underwent the same.

DISCUSSION:

- Majority of the patients aged >60 who underwent Laparoscopic Cholecystectomy are males (58.4%)
- A significant number of them have comorbidities like Type II DM, Hypertension and IHD
- Nearly 1/4th of the patients aged >60 who underwent Laparoscopic cholecystectomy had undergone prior CBD stenting
- Duration of surgery was prolonged by 9.5 minutes in patients aged >60
- Duration of hospital stay was prolonged by an average of 2.2 days in patients aged >60
- The procedure is associated with higher rates of intraoperative complications requiring conversion to open cholecystectomy in age > 60 (9.23% as against 2.16% in age <60).

CONCLUSION:

Laparoscopic cholecystectomy is a relatively safe procedure routinely done for a wide range of indications. Surgery in the elderly is known to be more challenging than in the rest of the population due to underlying comorbidities viz. Type II Diabetes Mellitus, Hypertension, Ischemic Heart Diseases as well as local factors such as Adhesions, higher rates of prior CBD stenting for choledocholithiasis etc. [3][6] Therefore, planning elective Laparoscopic cholecystectomy in the younger age group for indications such as Cholelithiasis or Gall Bladder polyps early on in the course of the disease may help mitigate technical difficulties during the surgery, as well as complications due to comorbidities. [7][9][10]

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