SECTION 20. Medicine.

FREQUENCY OF COMPLICATIONS RELATED TO LAPAROSCOPIC CHOLECYSTECTOMY

Abstract: Objective: To determine various complications during laparoscopic cholecystectomy.

Design and Duration: This is a cross sectional study started in February 2018 and completed after duration of 6 months in July.

Setting: This study was conducted in surgical unit of Lahore General Hospital.

Patients and Methods: Study was conducted on patients admitted in general surgical unit of study institution during study period due to gall, bladder stones, mass or calculus or acalculus cholecystitis and they were planned for cholecystectomy. All investigations of these cases were done from within the hospital laboratory. All data of patients was recorded on a predesigned performa. Data was analyzed and results were calculated using statistical software. Consent was taken from the patients and also from medical superintendant of the hospital.

Results: There were 200 cases included in this study with 120 female cases and 80 male cases. Out of 200 cases 16 were undergone for open cholecystectomy due to complications developed in laparoscopic cholecystectomy. Out of 16 cases 4(25%) cases got CBD injury, 5(31.2%) were having gall, bladder adhesions, stones were present in 2(12.5%) cases and in 2(12.5%) cases peritonitis developed due to bile spillage.

Out of 200 cases, bleeding from liver bed occurred in 25(12.5%) cases, CBD injury happened in 2(1%) cases, gut injury in 3(1.5%) cases, spillage of stones in 5(2.5%) cases, post operative collection of bile in 9(4.5%) cases and retained stone in CBD was seen in 4(2%) cases.

Conclusion: Laparoscopic cholecystectomy is an advanced procedure with many benefits but carrying few serious complications as well requiring expertise to reduce morbidity and mortality.

Key words: Laparoscopy, Cholecystectomy, CBD injury, Peritonitis, Gall stones

Language: English

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Introduction
Cholelithiasis is a very common problem among the people of Pakistan. It is more common among females than male. It may be due to increased blood cholesterol and less physical activity in women of our country as they mostly remain at home most of the time. All data of patients was recorded on a predesigned performa. Data was analyzed and results were calculated using statistical software. Consent was taken from the patients and also from medical superintendant of the hospital. Patients were selected according to a pre set criteria. Male cases are less frequent. Gall stones lead to cholecystitis and inflammation, gangrene and perforation of gall...
bladder. Abscess may be formed after perforation. Mass, stones and inflammation of gall bladder are indications of surgical removal of gall bladder either by open cholecystectomy or via laparoscopic cholecystectomy which is an advance modern procedure with few complications than open cholecystectomy. Expert doctors are required for laparoscopic procedure because it is a fine procedure and if not done properly may cause serious complications leading to laparotomy.

Patients and Methods

This is a cross sectional study conducted in a tertiary care hospital located in Lahore, a city of Pakistan. Study was completed in duration of 6 months. Study was conducted on patients admitted in general surgical unit of study institution during study period due to gall, bladder stones, mass or calculus or acalculus cholecystitis and they were planned for cholecystectomy. All investigations of these cases were done from within the hospital laboratory. All data of patients was recorded on a predesigned performa. Data was analyzed and results were calculated using statistical software. Consent was taken from the patients and also from medical superintendent of the hospital. Patients were selected according to a pre set criteria. Out of 200 cases 16 were undergone for open cholecystectomy due to complications developed in laparoscopic cholecystectomy.

Results

There were 200 cases included in this study with 120 female cases and 80 male cases. Out of 200 cases 16 were undergone for open cholecystectomy due to complications developed in laparoscopic cholecystectomy. Out of 16 cases 4(25%) cases got CBD injury, 5(31.2%) were having gall bladder adhesions, stones were present in 2(12.5%) cases and in 2(12.5%) cases peritonitis developed peritonitis due to bile spillage. Out of 200 cases, bleeding from liver bed occurred in 25(12.5%) cases, CBD injury happened in 2(1%) cases, gut injury in 3(1.5%) cases, spillage of stones in 5(2.5%) cases, post operative collection of bile in 9(4.5%) cases and retained stone in CBD was seen in 4(2%) cases.

Table 1.

| Causes of conversion to open cholecystectomy | Number of patients (N) | % |
|--------------------------------------------|------------------------|---|
| CBD injury                                 | 4                      | 25 |
| Adhesions of gall bladder                  | 5                      | 31.2 |
| Stones in CBD                              | 2                      | 12.5 |
| Spillage of CBD stones                     | 2                      | 12.5 |
| Gall bladder perforation                    | 3                      | 8 |
| **Total**                                  | **16**                 | **100** |

Table 2.

| Complications due to laparoscopic cholecystectomy | Number of patients (N) | % |
|--------------------------------------------------|------------------------|---|
| Liver bed bleeding                               | 25                     | 12.5 |
| CBD injury                                       | 2                      | 1 |
| Omental bleeding                                 | 6                      | 3 |
| Stones spillage                                  | 5                      | 2.5 |
| Biliary collection after operation               | 9                      | 4.5 |
| Cystic artery avulsion                           | 5                      | 2.5 |
| Retained CBD stones                              | 4                      | 2 |
| Gut injury                                       | 3                      | 1.5 |

Discussion

It may be due to increased blood cholesterol and less physical activity in women of our country as they mostly remain at home most of the time. Male cases are less frequent. Gall stones lead to cholecystitis and inflammation, gangrene and perforation of gall bladder. Abscess may be formed after perforation. Mass, stones and inflammation of gall bladder are indications of surgical removal of gall bladder either by open cholecystectomy or via laparoscopic cholecystectomy which is an advance modern procedure with few complications than open.
cholecystectomy. Expert doctors are required for laparoscopic procedure because it is a fine procedure and if not done properly may cause serious complications leading to laparotomy. This is a cross sectional study conducted in a tertiary care hospital located in Lahore, a city of Pakistan. Study was completed in duration of 6 months. Study was conducted on patients admitted in general surgical unit of study institution during study period due to gall, bladder stones, mass or calculi or acalculus cholecystitis and they were planned for cholecystectomy. All investigations of these cases were done from within the hospital laboratory. All data of patients was recorded on a predesigned performa. Data was analyzed and results were calculated using statistical software. There were 200 cases included in this study with 120 female cases and 80 male cases. Out of 200 cases 16 were undergone for open cholecystectomy due to complications developed in laparoscopic cholecystectomy.

**Conclusion**

Cholecystectomy is a very common procedure practiced in general surgery wards. Laparoscopic cholecystectomy is an advanced procedure with many benefits but carrying few serious complications as well requiring expertise to reduce morbidity and mortality.

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