



LAPAROSCOPIC CHOLECYSTECTOMY AND FIND OUT RISK OPERATOR FOR CONVERSION IN AL- RAMADI TEACHING HOSPITAL RETROSPECTIVE ANALYSIS

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Article history:	Abstract:
Received: December 4 th 2021 Accepted: January 4 th 2022 Published: February 13 th 2022	The research aims at Risk Factor for Conversion during Laparoscopic Cholecystectomy Retrospective Analysis, which is considered the true balance for treating symptomatic cholelithiasis, and cholecystectomy becomes necessary. It may be the cause of severe colic and sometimes cause symptoms that the patient cannot live with and there is treatment with drugs, but severe progress in Methods of surgically removing the gallbladder makes surgery an ideal solution for some cases and the process of removing the gallbladder becomes a necessity if the pain becomes unbearable and cannot be lived with, and the fear of gallstones sliding to block the main channel and cause pancreatitis, it is necessary to perform the operation although the surgery to remove the gallbladder has become easy After the emergence of new advanced methods on top of the laparoscope, there are some steps that the patient must follow after the operation to avoid complications and method was laparoscopic cholecystectomy in Al-Ramadi Teaching Hospital The data were recorded which indicated the gender and age of the sample in addition to that indication of the LC with several evaluations, including the evaluation of the performance of the surgeon who performed the operation with the evaluation of the complications that occurred after the operation and noting the period during which the patient stayed in the hospital..

Keywords: Laparoscopic Cholecystectomy, Teaching Hospital Retrospective Analysis.

INTRODUCTION

Cholecystitis is inflammation of the gallbladder. The gallbladder is a small, pear-shaped organ on the right side of your abdomen, just below the liver. The gallbladder stores a digestive juice that is excreted in the small intestine (bile).

In most cases, gallstones that block the tube that leads out of the gallbladder cause Cholecystitis. This causes bile to build up, which can cause inflammation. Other causes of Cholecystitis include bile duct problems, tumors, serious illnesses, and some infections. Cholecystitis can lead to serious and sometimes life-threatening complications, such as a rupture of the gallbladder, if left untreated. Cholecystitis treatment often includes cholecystectomy.



Signs and symptoms of Cholecystitis may include:

1. Acute pain in the upper or middle abdomen
2. Pain spreading to the upper shoulder or back
3. Pain when touching the abdominal area
4. Nausea
5. vomiting
6. fever

A person with this type of cholecystitis may not have any symptoms, and in other cases, symptoms similar to those that appear on a person with acute cholecystitis may appear, such as: abdominal pain, nausea, and vomiting.

The pain associated with chronic cholecystitis is characterized by pain that appears intermittently, similar to attacks, and this type of cholecystitis is not accompanied by the emergence of a fever, unlike the previous type, and the cause of cholecystitis in most cases is gallstones, as gallstones may cause a complete blockage in the duct.

The cyst and thus cutting the way to the juice coming from the gallbladder, which leads to the accumulation of this juice in the gallbladder and at other times, the chances of developing cholecystitis may increase due to several factors, such as:

That the patient has recently undergone one of the following: undergoing critical surgery, exposure to an infection that weakened the immune system, or recent recovery from a serious illness.

The gallbladder deficiency reduced its ability to empty its contents of the juice in the intestine having one of the following diseases: sickle cell anemia, obesity, and diabetes, the chances of developing Cholecystitis are generally higher among women after the age of 50 and among men after the age of 60.

Gallbladder diseases

1. Many diseases that can affect its function, which leads to the treatment of symptoms and problems that may result from them by eradicating them, affect the gallbladder. Among the diseases that can affect the gallbladder: Gallstones: Gallstones can form in the gallbladder from substances that are in the bile, such as cholesterol, salts, and calcium, which in turn block the course of the bile.
2. Cholecystitis: It can be acute or chronic, because of stones or a tumor blocking the course of the bile, which leads to its stagnation and the proliferation of bacteria in it, and thus Cholecystitis.
3. Stones in the biliary tract: gallstones can slide into the neck of the gallbladder or the bile ducts, which leads to their inflammation.
4. Gallbladder eruption: If the symptoms of the gallbladder are neglected, this may lead to an explosion of the gallbladder, and if diseases of the

gallbladder are not diagnosed and not removed, their bursting may lead to serious consequences that threaten the patient's life; As the mortality rate for gallbladder burst may reach 30%.

5. Gallbladder abscess: As a result of the accumulation of pus from inflammation in the gallbladder, the pus is a group of dead cells, bacteria and white blood cells.
6. Gallbladder cancer: although it is rare, if it is not treated, it can lead to the spread of cancer to neighboring organs. As the cancer moves from the inner surface of the gallbladder to the outer surface, then to the organs adjacent to the gallbladder, and symptoms similar to those of acute Cholecystitis occur.
7. Gallbladder gangrene: Any organ in the body that does not work and decays spontaneously and this also occurs if the gallbladder stops working due to lack of blood supply to it due to infection, diabetes, or any disease that obstructs the bloodstream.
8. Gallbladder disease without the presence of Calculus Gallbladder Disease Here, the patient suffers from the symptoms of gallstones, but without the presence of gallstones, and here there is a malfunction in the gallbladder muscles or valves that do not work effectively, Porcelain Gallbladder is a rare case of gallbladder disease and most cases are due to gallstones

Gallstones

In addition to Cholecystitis, gallstones infection is one of the most common diseases that affect the gallbladder, the reasons that lead to gallstones are not completely known until now. Doctors believe that the bile contains a large amount of cholesterol, leading to the formation of gallstones, or that the bile contains a large amount of bilirubin, or that the gallbladder does not empty the bile in a correct or complete way. There are different types of stones that may form in the gallbladder, including: cholesterol stones, which are yellow in color, which is the most common, and black pigment stones that are dark brown or black in color and include bilirubin in their composition, and mixed stones.

There are several things that increase a person's risk of developing gallstones, including usually females develop gallstones more often than males; because estrogen raises cholesterol Obesity. Poor eating habits, such as eating too little fiber and too many fatty foods. Rapid and sudden weight loss. If there are family members who have had gallstones. Take medications that contain estrogen, such as hormonal drugs.

Usually, people with gallstones but without disease symptoms resort to doctors to monitor and follow



up their condition without surgical intervention, but in the case of gallstones that are accompanied by disease symptoms; The best solution is to undergo a surgery to remove the gallbladder, and after the operation it is necessary to eat foods low in fat content for a temporary period, and there are medicines that the patient can take for a period of no less than two years, but they are ineffective, and after stopping taking them, stones can return.

If the gallbladder is not treated when it is inflamed, it may cause many complications, some of which may pose a threat to a person's life, including Gallbladder cell death and then burst; a gallbladder eruption is dangerous. Where it can lead to peritonitis and then blood poisoning, and the gallbladder bursts in 10-15% of cases of gallbladder diseases, and Cholecystitis may lead to the transmission of inflammation to the bile, which leads to the formation of pus and its collection around the gallbladder, and the accumulation of pus to the formation of more severe symptoms such as high temperature and severe pain in the abdomen. Formation of a fistula between the gallbladder and the gastrointestinal tract, especially the duodenum, which leads to the transmission of gallstones to the small intestine, which in turn leads to intestinal obstruction, and may lead to intestinal paralysis.

Risks of laparoscopic cholecystectomy **Infection at the site of the wound**

An infection may occur at the place of the incision made by the doctor, usually this infection is something that is not worrisome and is treated with medication, but in rare cases the infection may reach the lower layers of the abdomen and the skin, in that case the doctor opens the wound again to clean it of bacteria and infection. In most cases, the doctor takes all necessary precautions to prevent the possibility of infection during the laparoscopic cholecystectomy, such as taking care of all sterilization steps and using the latest equipment and endoscopes to prevent transmission of infection.

Bleeding

Bleeding occurs during the first day after the operation, sometimes due to tissue damage, and it is usually inside the hospital, so it will not be a serious matter, but in rare cases bleeding may occur after weeks and he may have to undergo surgery to stop the bleeding, and the patient must be informed of all the medicines that He takes it to make sure that there is no drug interference, such as liquid medications.

Anesthesia risks

These risks are common in all anesthesia surgeries.

Minor muscle spasms or headaches may occur, and in very rare cases, a shock that causes a drop in blood pressure may occur after anesthesia.

But all necessary precautions are taken by the cholecystectomy doctor and the accompanying medical team by reviewing the patient's medical history and whether there are any similar cases in the family that have occurred with her, as well as about the medicines that the patient is taking.

There are also some risks that are specific to laparoscopic cholecystectomy, most of them are caused by a medical error, such as injury to the liver, kidneys, or diaphragm because it is located very close to the place of the operation.

Alternatively, bile leakage during the operation due to a medical error that resulted in damage to the gallbladder itself or the gallbladder ducts the occurrence of kidney failure due to allergies. But the patient can avoid all these risks by choosing a cholecystectomy doctor who is an expert in this type of operation, as well as choosing a hospital or medical center equipped with all the preparations and devices that facilitate the procedure without any severe risks.

The gallbladder is sometimes exposed to a group of different problems that cause its inflammation, which calls for resorting to a laparoscopic cholecystectomy and laparoscopic cholecystectomy is one of the famous and necessary operations in many cases, especially in the case of cholecystitis due to the formation of stones and the absence of the ability to get rid of them naturally inside the body there is a thick fluid called Bile is produced by the liver, and bile has a major role in digesting food, especially fatty foods, and the gallbladder at the bottom of the liver stores bile and excretes it when needed.

The gallbladder suffers - as we mentioned earlier - with some problems that affect its efficiency, and neglecting to treat gallbladder problems causes a feeling of severe pain and it may develop into bleeding and leaking of the gallbladder abnormally. There are many ways to treat gallbladder problems, which include drug therapy, but the patient may have to certain stages of resorting to surgical treatment, and laparoscopic cholecystectomy is the ideal treatment for these problems.

There may be some cases similar to gallstones such as appendicitis, ulcers, pancreatitis, and gastro esophageal reflux, and a cholecystectomy doctor rules out all these diseases and problems before resorting to a surgical solution and laparoscopic cholecystectomy.

And laparoscopic cholecystectomy is a surgery in which the doctor removes the gallbladder through several small openings instead of resorting to open surgery, which causes many risks such as infection and bleeding due to large wounds in the abdomen,



and the operation of cholecystectomy is performed laparoscopic by making small openings in the abdomen where it is inserted. A small tube from one opening is connected to a camera so that the doctor can clearly see the gallbladder using an external display in the operating room, and the gallbladder is removed from one of the other openings.

The main reason for this blockage is the formation of large stones that cannot be removed naturally or removed without harming the gallbladder, and these stones prevent the passage of bile or bile into the digestive system. Among the most important complications of biliary obstruction:

Laparoscopic cholecystectomy is a very safe operation as long as it is performed by an experienced surgeon and in a hospital equipped with modern, high-quality techniques and surgical tools and sterilization, neglecting to choose a skilled surgeon and a well-equipped hospital may expose the patient to several problems.

There are also some cases in which the doctor cannot remove the gallbladder laparoscopic, which calls for his resort to open surgery, and these cases are:

1. Having a bleeding disorder
2. The presence of scars resulting from previous operations
3. The presence of some reason that would prevent the doctor from seeing the gallbladder clearly

After the laparoscopic cholecystectomy, and after the effect of the anesthetic wears off, the patient is detained in the hospital for only one day to check on his health, and then the patient returns home to start the journey of recovery.

The recovery period after the operation is usually short, unlike open surgeries, which require more care and a longer hospital stay. One of the advantages of laparoscopic cholecystectomy is that the patient does not feel severe pain throughout the recovery period.

It is important for the patient to adhere to all the doctor's instructions, both those related to movement, in addition to adhering to the treatment program in order to spend a shorter recovery period and get a full recovery.

The patient must monitor his condition in the days immediately following the operation and seek the help of one of his relatives or friends in anticipation of any possible complications. In the event of bleeding at the site of the wound, difficulty in urinating, breathing problems, severe pain, or an increase in temperature above the normal level, the surgeon should go quickly to conduct an immediate examination and to determine the situation.

MATERIAL AND METHODS

An analysis was made to the existing samples to find out the risks of the gallbladder and if the patients had undergone a cholecystectomy in Al-Ramadi Teaching Hospital, all samples were taken, weight characteristics, body mass index, height and all characteristics related to patients' age, LC index, conversion to open cholecystectomy, reason for conversion and performance Surgeon (surgeon or resident), comorbidity, type of complications, length of stay in hospital, deaths for 30 days, and the operation consisted of 5 surgeons.

The patient was classified as having comorbidity when at least one of the following diagnoses was reported in the medical file at the time of cholecystectomy: diabetes mellitus, high blood pressure, myocardial infarction, congestion of the heart. A bile duct injury vulgaris included minor postoperative complications.

Complications such as superficial site infections, urinary retention and cystitis, major complications such as intraperitoneal bile leakage, necessity of interventional procedures and death.

RESULT

960 samples were collected from the hospital, which were divided into 300 women and 660 men, and all the required tests were performed on them with appropriate statistical analysis of the results.

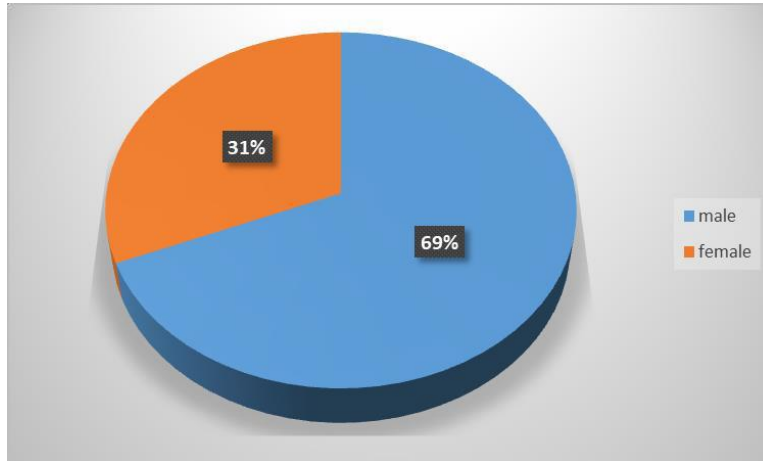


Figure 1- explain distribution of sample

Table 1- Baseline characteristics of patients

Comorbidity	N
NO	580
YES	380
sign	
causal cholecystolithiasis	750
sharp cholecystitis	90
recent acute cholecystitis	55
recent biliary pancreatitis	55
recent obstructive jaundice	8

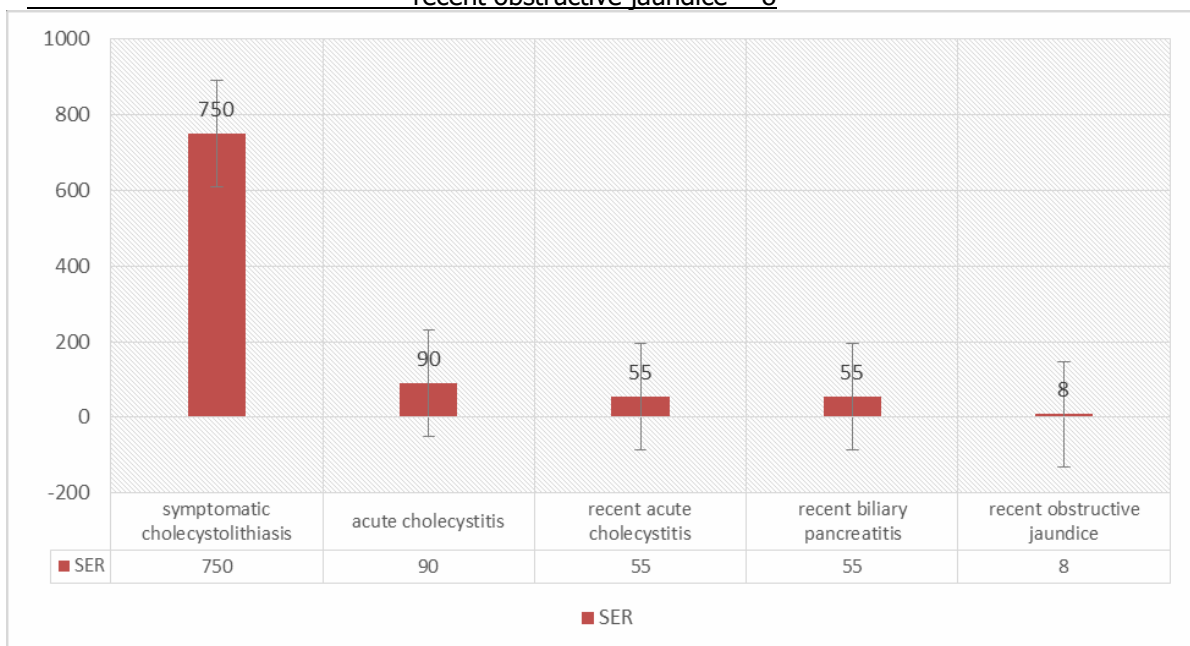


Figure 2- Figure showing the distribution of characteristics



Table 2- features of patients undergoing a laparoscopic cholecystectomy

	LC	CC	p-value
SEX			0.003
men	26	44	
female	70	50	
Indication, n (%)			0.003
symptomatic cholecystolithiasis	80	33	
acute cholecystitis	5	32	
recent acute cholecystitis	5	12	
recent biliary pancreatitis	6	6	
recent obstructive jaundice	0.3	3	
First operator, n (%)			0.04
resident	83	70	
surgeon	12	18	
Complications, n (%)			0.001
no	80	40	
yes	10	48	
Age	20-80	(22-82)	0.0002
Hospital stay			1-55 (1-62) 0.0002

Table 3 - Univariate regression analysis of patients undergoing a laparoscopic cholecystectomy

SEX	OR	95%CI
men	1	
female	2.47	1.65-3.98
Indication, n (%)		
symptomatic cholecystolithiasis	1	
acute cholecystitis	13.3	8.13-21.9
recent acute cholecystitis	6.33	3.3-11.9
recent pancreatitis	2.65	1.11-5.87
recent obstructive jaundice	24.8	6.12-104.21



DISCUSSION

There was a huge danger of transformation ($p < 0,01$). Patients with a background marked by late obstructive jaundice required change in 63%, yet the modest number of patients ($n = 8$) made further investigation worthless. Comorbidity was fundamentally more present in the CC gathering contrasted with the LC gathering (52% versus 37%; $p < 0.01$). Inconveniences were additionally more regularly found in the CC gathering contrasted with the LC gathering (35% versus 12%; $p < 0.003$). There was a huge distinction in difficulties among people (20% versus 13%; $p < 0.01$). Length of medical clinic stay was essentially more for men contrasted with female, albeit the middle clinic stay was 4.0 days for both genders (men 4.0 (1–55) days versus female 4.0 (1–62) days; $p = 0.003$). Signs for laparoscopic cholecystectomy were essentially unique in both sex gatherings, preferring actually simpler indicative cholecystolithiasis in women. Laparoscopic cholecystectomy is viewed as the highest quality level in treating suggestive cholelithiasis (2–8). Its advantages contrasted with open cholecystectomy are

lower dreariness, more limited medical clinic stay, faster recuperation and diminished postoperative torment, Conversion to open cholecystectomy is, be that as it may, in any case important in up to 20% of the cases cap higher than is accounted for commonly. Most reports on transformation rates, notwithstanding, have been distributed from exceptionally concentrated with broad and extraordinary skill in laparoscopic surgery. General careful practice may have to some degree less great outcomes.

CONCLUSION

It seemed that cholecystectomy did not depend on risk, and among healthy patients, the lowest risk was the least likely to undergo cholecystectomy by enhancing the rate of selective cholecystectomy among patients of the higher risk group and avoiding future complications among members of this critical group. In addition, similar information allows doctors to avoid cholecystectomy in patients who face high risks due to surgery, but the likelihood of developing complications due to gallstones is low.

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