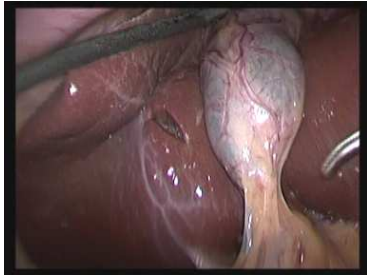


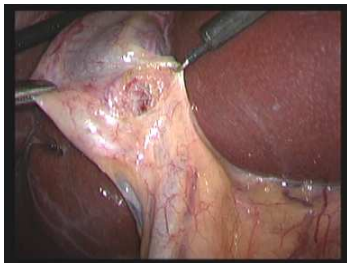
Patient information handout

Laparoscopic Cholecystectomy (Laparoscopic removal of gall bladder/ Keyhole surgery)



Laparoscopy is a method by which the inside of the abdomen is examined using a telescope. This method has been commonly used for family planning operations in women (Tube blocking) in our country from 1969.

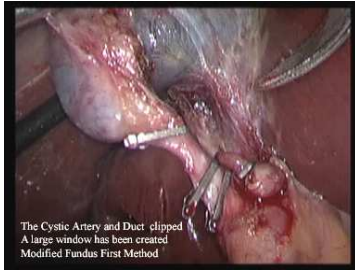
The advancements in video technology, introduced a small video camera for the medical field in 1980. This video camera, when attached to the laparoscopy telescope, allowed images to be seen clearly on the television screen. With this development major general surgical operations became possible to be performed by the laparoscope. The first laparoscopic removal of gall bladder (laparoscopic cholecystectomy), was performed by Dr. Philip Mouret, in France in 1989. In India, Dr. T E Udwardia was the first to perform this operation in 1991 in Bombay. In Karnataka, I started in Bangalore in 1992. These operations are also known as Key Hole Surgery or Laser surgery by the common people.



The operation involves removal of the gall bladder with 4 small holes in the abdominal wall. The recovery from the operation is quick with a short hospital stay and return to work within a week. In comparison, the conventional operation or the open operation involves an 8-10 inches cut in the abdomen, about 8-10 days hospitalisation and about 4-6 weeks to get back to routine work. The cosmetic result of this operation is obviously superior to the open cholecystectomy. The inside of the operation is exactly similar to open operation.

The technique entails the abdominal cavity being distended with carbon dioxide gas through a needle puncture. The first tube is then inserted into the abdomen. Through this tube the telescope is passed and connected to the monitor through the special camera. Further 3 punctures are then made under vision. The instruments are passed into the abdominal cavity through these holes to perform the operation. Looking at the monitor the entire operation is performed. The gall bladder is removed through one of the holes. We remove it through the umbilicus (navel). If required this opening is made slightly bigger.

Laparoscopic cholecystectomy is now well established, and accepted all over the world as the best method of treating symptomatic gall bladder stones. With experience, this method of keyhole surgery is also used for the operations of appendix, hernia, peptic ulcers, ovarian cysts, uterus etc. These operations are now performed in some of the specialised hospitals in Bangalore and rest of the country. The operation needs highly skilled surgeons and high tech equipment. The extra cost is compensated by lesser hospital stay and quick recovery.



The operation requires regular anesthesia like in open surgery and in about 10 percent of cases may require to be changed to open surgery for technical reasons. The new operation has revolutionised the treatment, especially for gall bladder stones. The main advantage is the absence of the large incision. The early return to work and decreased hospital stay will be most acceptable and welcome by patients.

FAQ: Frequently Asked Questions

What are Gall Stones and what can they cause?

Stones in the Gall Bladder can be single or multiple, small or large. They can remain silent or give rise to problems like severe pain, fever, vague abdominal discomfort, jaundice, inflammation of the pancreas or very serious pain and illness.

How are these stones formed?

This is due higher concentration of salts etc in the bile. Let me explain with an example. In water there is hard and soft water depending on places. In places with hard water the content of salts are more. And here the water produces a layer of salt at the bottom of the vessels when the water is kept for long time or boiled. Similarly, in bile containing higher concentration of salts, if the bile is kept in an organ for long time the salts can sediment to the bottom and produce stones.

Gall Bladder is a mini storeroom. The bile stays here for long time. And so this type of bile in these patients is able to produce stones.

What is the treatment?

The treatment for gallstones producing problems is to remove the gall bladder with the stones. This is traditionally done through a regular operation. Nowadays we can do this with the use of laparoscope. This is also an operation but instead of a large cut, the operation is done with 3-4 small holes. It does require hospitalization and anesthesia. Details are given later.

Are there any problems or disability with removing gall bladder?

Gall bladder, as I have told is a mini storeroom. It does not have any big function. Normally, the liver produces bile and it passed through a tube called Bile Duct into the intestine. The extra bile gets stored in the gall bladder. So, removing gall bladder does not produce any problems. For example, the front pocket in a shirt is like a storeroom and the person uses to keep pen, paper etc.

This pocket is removed. It does not cause any problems. There are many men and most women do not have pockets. They will keep their things somewhere else.

Can we use medication or some other method and avoid operation? I hear that these days they can crush the stones with some new instruments.

There are medicines to dissolve stones. But they are useful in a small very specific group. The problems are that it requires at least 12-18 months treatment and so are expensive. The second problem is, since the cause is higher concentration bile with gall bladder as storeroom, in the course of time the stones will reform after stopping treatment. So, we do not normally recommend this to our patients. The operation is permanent, cost effective with no ill effects.

The stone crushing is an established method in kidney stones. It is called Lithotripsy. It is done with the use of Ultra sound waves. The kidney is close to the body wall and can be easily approached compared to gall bladder, which is hidden under the liver. The stones are blasted by the ultrasound waves and made to a powder form. These can be easily washed out in the urine. In gall bladder even if the stones are blasted to powder they cannot be washed out. The other important accept to know is that kidney is not a dispensable organ compared to gall bladder. We will use all the methods in kidney stones to avoid removal. I hope this is now clear.

Laparoscopy operation- where are these operations done?

These are very skilled operations with the use of very special and high tech equipments. So, you need a good well-equipped hospital and a surgeon trained in doing Laparoscopic operations.

Are these operations expensive?

No, the cost is similar to open or conventional operation. The higher cost in laparoscopy will be compensated by reduced hospital stay.

I read in the newspaper that there are many complications with these operations?

As told earlier, these operations require special skills and expertise. The complications are less than conventional operations in the hands of trained experts.