

# Introduction

Laparoscopy, the new Tool in the surgeon armamentarium has suddenly created a new interest in developing better ways of managing numerous surgical problems. Laparoscopic cholecystectomy is the first most shining example of success of endoscopic surgery (*Saunders, 1995*).

No other surgical development has had such a dramatic and pivotal impact on abdominal surgery as laparoscopic cholecystectomy - Not only has it revolutionized biliary surgery, but it has become the index operation for a variety of other laparoscopic surgical procedures (*Goldstein et al., 1994*).

Surgeons have taken up the banner "why punish the skin, fat, and muscles when all you want is the gall bladder"?. The extent of the incision seems to correlate with the length of the hospital stay and the time to return to work. The ultimate goal is to achieve safe surgery with the maximum benefit to the patient (*Branum et al., 1993*).

Laparoscopic cholecystectomy was first performed in human by Mouret in France in 1987, then has gained a widespread acceptance among surgeons all over the world, also it was so highly praised and demanded by patients as it is associated with less pain,

shorter hospital stay, quicker return to normal activities and better cosmetic results. Many surgeons have been reluctant to perform laparoscopic cholecystectomy for fear that general surgery will decline into a discipline of laparology (*Mori et al., 1995*).

Surgeons are enthusiastic about laparoscopic cholecystectomy Technique as it promises more efficient Turn over and enthusiasm for new Technique must not obscure the possibility of complications as any other surgical procedure (*Martin et al., 1992*).

The single most important variable that determines the safety and efficacy of laparoscopic cholecystectomy is the skill and laparoscopic surgical experience of the surgeon performing the procedure. Surgeons with lesser experience are more likely to cause injuries and they must be cognizant of the potential problems during their learning phase and should have a low threshold for converting to an open cholecystectomy (*Stellato, 1992*).

The advent of laparoscopic cholecystectomy as a new treatment modality has not changed the reasons why gall bladders are removed, and as surgeons have become experienced in the Laparoscopic technique, The indications for Laparoscopic cholecystectomy have expanded to include many of the contraindications. But despite the liberalization of patient selection, not all individuals are condiates for laparoscopic cholecystectomy. (*Nathaniel, 1993*)

The performance of Laparoscopic cholecystectomy is currently hindered by Two-dimensional imaging, diminished tactile feed back, the deleterious local and systemic effects of CO<sub>2</sub> pneumoperitoneum, a decreased ability to affect hemostasis, the ever-present potential necessity to convert the operation to standard laparotomy and expensive technology. *(Jacobs, 1991)*

The future of laparoscopic cholecystectomy is being supported by rapid advances in technology. New video systems capable of displaying Three -dimentional images and miniaturized fiberoptic scopes are now available. Computer enhanced Three-dimensional ultrasound images provide the surgeon with the ability to examine the content and consistency of tissues in addition to their appearance.

Advances in mechanical retraction may eliminate the need for CO<sub>2</sub> insufflation of the abdomen. Tissue repair using tissue glues or Laser - mediated processes may reduce the need for endocavitary suturing. These advances in technology and techniques may reduce the morbidity and mortality of these surgical procedures and, ultimately, improve the standard of care for surgical patients *(Moosa et al., 1992)*