LAPAROSCOPIC SURGERY, A NEW REVOLUTION

When we joined surgery we learned from our seniors that "To cut is to cure," "The greater the surgeon, the bigger the incision," and "Wound heals from side to side and not top to the bottom". Despite these sayings we learned that that surgery causes significant morbidity and mortality. Pruitt has stated "Surgery…is a controlled injury of variable magnitude…" We surgeons have to be very careful while giving injury to our patients. Lucky for us the turn of century showed a new revolution. In 1910 Hans Christian Jacobaeus of Sweden reported the first laparoscopic operation in humans. This started a new era and in the ensuing several decades, numerous individuals refined and popularized the approach. The introduction of computer chip television camera was a seminal event in the field of laparoscopy which lead to further improvements. This innovation made it possible to project a magnified view of abdomen.

Initially laparoscopy started in Gynecology and various authors contributed to development of techniques for this specialty. The first publication on Diagnostic Laparoscopy by Raoul Palmer, appeared in the early 1950s, followed by the publication of Frangenheim and Semm. Hans Lindermann and Kurt Semm practiced CO2 hysteroscopy during the mid-seventies. Semm established several standard procedures that were regularly performed, such as ovarian cyst enucleation, myomectomy, treatment of ectopic pregnancy and finally laparoscopic-assisted vaginal hysterectomy. Prior to 1990, the only specialty performing laparoscopy on a widespread basis was gynecology, mostly for relatively short, simple procedures such as a diagnostic laparoscopy or tubal ligation.

The general surgery adopted laparoscopy quiet late. In 1981, Semm, from Germany, performed the first Laparoscopic Appendectomy. Following his lecture on Laparoscopic Appendectomy, the President of the German Surgical Society wrote to the Board of Directors of the German Gynecological Society suggesting suspension of Semm from medical practice. Subsequently, Semm submitted a paper on Laparoscopic Appendectomy to the American Journal of Obstetrics and Gynecology, which was rejected as unacceptable for publication on the ground that the technique reported on was ' unethical.' His paper was finally published in the Journal Endoscopy. The introduction in 1990 of a laparoscopic clip applier with twenty automatically advancing clips made general surgeons more comfortable with making the leap to laparoscopic cholecystectomies.

After performance of Laparoscopic Cholecystectomy in 1987 at France by Mouret it was carried out in United States during the later part of 1988 by McKernan and Saye and shortly thereafter by Reddick and Oslen. The procedure was then widely disseminated during 1989 and 1990 and superseded open cholecystectomy with rapidity that has never seen before. This procedure reached our country in 1991 when the first laparoscopic cholecystectomy was performed.
In Sheikh Zayed Medical College the first laparoscopic cholecystectomy was performed in 2004 and so far more than 300 procedures have been performed. In last three years we have introduced various minimal access procedures ranging from basics to advanced complexity and are more commonly in elective surgeries. With advancement of training especially to residents and senior registrars the emergency room procedures are becoming more frequent in our settings also. Traditionally laparoscopy was thought to be contraindicated in peritonitis because of theoretical risk of bacteremia and endotoxemia by induced pneumo-peritoneum. But now laparoscopy is gaining popularity in variety of emergency procedures, with advantage of better quality of peritoneal washing, easy cleaning of abdominal recess, minimal destruction of abdominal wall and faster recovery. The endotoxemia and bacteremia are considered theoretical limitation only and various studies have documented safety of laparoscopy in emergency. They have advantage of less pain, faster return to normal daily activity, improved pulmonary function, decreased incidence of wound infection and ultimately improved survival. We are now broadening our expertise to emergency procedures εs well.

Our range of minimal invasive surgery procedures in emergency include e.g Appendectomy, ruptured ectopic, peritonitis such as perforated duodenal ulcer, enteric perforation.

In Sha Allah, we will very soon embark upon complex procedures like spleenectomies and hemicolectomies. We are just waiting for arrival of new equipment like harmonic scalpel which gladly is in process.

I see a very bright future of laparoscopic surgery in Pakistan in general and also in our medical college specifically. So far many of my junior surgeons are trained and now quiet confident in performing these procedures. I wish them very well in coming years to come.

Prof. Dr. Mohammad Idrees Anwar
MBBS,FRCS,(Glas) DCPS,HPE,(CPSP)
Head of Surgery/Director Medical Education
Sheikh Zayed Medical College
Rahim Yar Khan