



Scarless Surgery?

~BY KAMRAN GOUDARZI, M.D., F.A.C.S., F.I.C.S.~

Actual patient's belly button with barely visible scar after single incision gallbladder surgery.



Is it possible to do surgery without any scar? I mean abdominal surgery where the gallbladder or appendix is removed or to undergo hiatal hernia surgery, a bowel resection or even gynecological surgery without a scar? This seems feasible at this time.

Abdominal surgery up to the early 90's required a relatively major incision. Around 1992 laparoscopy (key hole surgery) became available. At first some people called it laser surgery since to most people it gave a feeling of minimally invasive surgery. Laser was being used by some surgeons for this procedure. In reality it was the technique not the laser which made this minimally invasive. Laser soon fell out of fashion and most surgeons currently do not use laser at all for this procedure. Like every change in the history of science and medicine it was met with suspicion and skepticism. However, patients were leaving the hospital same day, returning to work earlier, recovered physically significantly faster and had minimal scars. Technology soon caught up with the technique and the procedure has gotten easier and we are attempting tougher and tougher procedures laproscopically. What appeared as a chapter from a science fiction book is now considered as the norm. As science and technology is moving rapidly forward, so are surgical techniques.

If I asked you to remove a small purse or diamond from a room, you could either blow the wall down and remove the purse, then rebuild everything behind you, or, use a small 5 mm camera and a few delicate instruments, go through the key hole in the door and remove the purse. On the latter technique there would be almost no repair required at the end of your procedure.

This is a simple analogy between laparoscopic and open surgery.

Over the past few years other approaches have been investigated including removing organs like the gallbladder through the vagina or mouth.

The most recent and in my opinion promising one is the Single Incision Surgery (SILS). It comes under numerous names depending which industry is behind it, who designed it, named it, or what training course one attended. Several months ago, the food and drug administration (FDA) approved devices produced by Covidien which helps make this procedure more feasible. Olympus also produced a one of kind laparoscopic scope with a flexible tip, making the visualization during the surgery very unique and "feasible". This should make cases which would be hard to do with a single incision easier and more feasible.

I recently had the opportunity to attend a SILS course and was quite impressed with their result. The incision is made through the umbilicus. This is the only incision made. The scar falls in the crease of the umbilicus (belly button) and therefore creates an invisible or non- visible scar, hence the name "Scarless Surgery".

Theoretically, it should be less painful (one incision versus lets say four needed for gallbladder surgery). If one is concerned about even the small four scars of laparoscopic gallbladder surgery, this minimizes this to only one and even this one (in the umbilicus) ends up being invisible, essentially this is minimizing minimal invasive surgery.

The first single incision gallbladder surgery was done in 1997 by an Italian surgeon. This required several stab wound incisions and putting needles through organs so it obviously did not attract much attention. I believe a marriage between improved technology of surgical in-

struments, notably SILS port, improved camera technology notably Olympus flexible scope and improved surgical technique has helped make this operation feasible and safe. Clearly as of any other surgical procedure it is not ideal for every patient and every surgeon.

Thanks to our visionary administrator Jack Barto, who has always supported bringing new technology which has been considered safe to our community, we are now able to offer the SILS procedure to people of Wilmington and surrounding communities.

I sincerely can say that I get my ultimate happiness out of the joy of a happy patient who has enjoyed a state of the art surgery successfully and I will finish this article with a few quotes from two patients who recently underwent SILS procedure by me. Patient "Marchelle" state "I truly can not tell you where my scar from my gallbladder surgery is". Patient "Robert" states "I recently needed my colon (large bowel) resected because of multiple attacks of diverticulitis. My blood sugar was getting hard to control because of chronic infection. I asked Dr. Kamran Goudarzi if it was possible to remove my gallbladder at the same time due to gallstones. He stated that this would normally require incisions in the upper and lower abdomen even with a laparoscope but this new technique (SILS) could be tried. He removed my gallbladder using the SILS technique and then proceeded with laparoscopic bowel resection at the same time. Normally it would take approximately 5 to 7 days of hospitalization for the bowel resection alone. With both procedures done I was able to recover and leave the hospital in 3 days and had very little pain and a very small scar from my laparoscopic colon resection only." I sincerely believe we should always try to im-

prove our technique and embrace technology that could be considered safe and effective for our patients. I believe Single Incision Laparoscopic Surgery is currently a prime example of this. SILS is a trademark of Covidien.



Dr. Kamran Goudarzi graduated from medical school from the University of London, England. He spent 2 years at the University of London Medical School post graduate training in surgery. He came to the United States in 1981 when he proceeded to spend another 5 years of post graduate training in the art of surgery. He is a member of Royal College of Physicians, Fellow of International College of Surgeons and Certified and recently recertified for the American Board of Surgery. He is a Fellow of American College of Surgeons. He is also Board Certified in Phlebology.