PRE-OP LAPAROSCOPY

This paper addresses the various potential complications related to laparoscopy.

Injury related to laparoscopy can be either from entry or from the actual surgical procedure being performed. In the general category of injury comes vascular injury. The likelihood of vascular injury is described between 0.1 and 6.4 per 1000 laparoscopies. Vascular injury most often is associated with injury to the mesenteric vessels during entry of the primary trocar or of the verres needle. The likelihood of vascular injury goes up if there is omentum or other tissue adherent to the anterior abdominal wall at the point of entry.

Bowel injury can occur as a consequence of laparoscopy. Bowel can become perforated at the time of entry either from the Verres needle or from the trocar. Usually perforation injury from the Verres needle can be observed as it likely is of a small caliber. Injury to the bowel from insertion of a large bore trocar some times is of more consequence and requires additional surgical procedure potentially including laparotomy and colostomy. Bowel can also be injured as a consequence of the procedure being performed or of thermal energy from either unipolar or bipolar cautery. Often bowel injury is not appreciated at the time of the initial surgery and, therefore, delayed diagnosis eventuates with potential requirement for readmission and reoperation.

Injury to the urinary tract most often is injury to the bladder and occurs with the insertion of the suprasymphyseal trocar. Great care is exercised to drain the bladder with a Foley catheter prior to commencement of the surgery to minimize this likelihood. Potential of thermal injury to the bladder can occur. Injury to the ureters may occur based on the surgical procedure being performed.

Neurologic compromise to the legs or back may result from the surgical positioning at the time of laparoscopy. Surgical positioning is of significant consequence.

Wound infection can occur as a consequence of the skin incisions. Hematoma of the anterior abdominal wall can occur at any trocar site. Occasionally, these hematomas are not diagnosed until days after the procedure when discoloration of the anterior abdominal wall is noted. Often these hematomas when found to be stable are observed and no additional surgery is required.

Pneumoperitoneum can cause complications. Gas embolism from direct insufflation into a vessel is very infrequent it, however, can lead to death. More commonly pneumoperitoneum can cause post-operative shoulder pain. This often results from the carbon dioxide in the intraperitoneal fluid forming carbonic acid which irritates the diaphragm. The diaphragm is supplied by the phrenic nerve which leads to the sensation of referred pain to the precordium or the shoulder. Typically, we take steps to reduce this likelihood by administering a bupivacaine solution to the peritoneal cavity prior to terminating the laparoscopy or by placing an intraperitoneal pain pump.

Herniation of the anterior wall can occur particularly with the use of large scope ports as we typically use for operative laparoscopy. Steps are taken to minimize this likelihood by placing free ties of 0-Vicryl suture through the fascia to draw together with the Carter-Thomason needle device. Herniations, however, can still happen and may result in symptomatic herniation of bowel and may also lead to reoperation at a later date.

There are potential complications including death related to the use of general anesthesia. The vast majority of young women do not have major complications from anesthesia in the contemporary period, however, and most complications arise in individuals who are considered poor medical risks for surgery pre-operatively. Aspiration pneumonia can occur so that it is very important that you remain N.P.O. (nothing by mouth) after midnight and the night prior to surgery. Eliminating food for several hours preoperatively reduces but does not eliminate the possibility of aspiration pneumonia.

Be sure to take any prescription medications you normally take with a sip water in the morning of surgery prior to presenting to the hospital.

Most studies suggest that the likelihood of injury from operative laparoscopy is to some extent based on the experience of the surgeon. Despite the fact that our complication rate is low, it is important to recognize, and the patient has been informed, that any complication, however rare, may occur unexpectedly in any given surgery. Discuss any issues with your physician. Should questions develop at a later date, contact this office to set up another preoperative appointment or bring your questions up when you see your doctor on the day of the scheduled procedure.

Additional information can be found at WebMD or similar, lay-accessible sources.