

**COPIC Tip:**

## **Medicolegal Risks in Laparoscopic Surgery**

*Documentation, team communication, and standardized protocols are among the key factors that support improved outcomes*

Laparoscopic procedures, with their minimally invasive nature, offer the potential benefits of less bleeding, reduced pain, and a faster recovery over open surgery. The laparoscopic approach has become the standard for many surgical procedures and requires advanced techniques, specialized equipment, and specific clinical decision-making.

These demands can also create distinctive medicolegal risks for medical providers. An analysis of research on closed claims and a review of COPIC occurrence reports revealed several key areas of risk with laparoscopic surgeries.

First of all, there is the importance of thorough pre-operative patient evaluation. In cases resulting in patient harm, the surgeon's choice of a laparoscopic approach over an open approach was often questioned. The decision was often judged as a failure of the surgeon to take into account the patient's co-morbidities (e.g., multiple previous abdominal surgeries).

A second area of risk is inadequate consent process. Documentation often did not substantiate that the risks, benefits, and alternatives were adequately explained to the patient. This included failure to document the possibility of conversion to an open approach along with possible surgical injury with the laparoscopic approach.

Intra-operatively, non-adherence to safety protocols, and deficient clinical decision-making contributed to the majority of surgical issues. These included improper performance of the surgical "time out," verifying the proper patient and procedure, and checking material availability and equipment functionality prior to commencing. These failures were associated with wrong site surgery, retained foreign bodies, surgical injury, and burns.

Documentation that vital anatomical structures were identified and protected was crucial to the defensibility of injuries. An example is documenting the "critical view of safety" during laparoscopic cholecystectomy. In some cases, lack of situational awareness contributed to poor decision-making, such as failing to recognize and react to a deteriorating situation. Persisting with a laparoscopic approach despite a lack of technical progress or an unstable patient are examples of this.

Intra-operative injuries included damage to bowel, bladder, blood vessels, ureter, reproductive organs and nerves. Bowel and vascular injuries were generally "entry complications," occurring during laparoscopic access with either a Veress needle or trochar. Intra-operative injuries were often associated with patient co-morbidities such as obesity and intra-abdominal adhesions.

It is important to note that in nearly half of cases in which a surgical injury occurred, expert review acknowledged that, despite good technique, the injury was a recognized complication inherent to the procedure. Expert reviewers supported the care when there was clear documentation that the surgeon identified and appropriately managed the injury in a timely manner (including consulting other specialists). This highlights the importance of thoroughly documenting both the consent process and the operative procedure.

Some intra-operative injuries (e.g., bowel, ureter) remained undiagnosed until the later post-operative period, when the patient became symptomatic. Surgeons sometimes fail to consider the possibility of a surgical injury in patient management. Experts often felt that the surgeon should have had a higher index of suspicion of injury, even in cases where the procedure was straightforward and uneventful.

**Based on expert opinions in these closed claim reviews, strategies to reduce surgical safety incidents in laparoscopic surgery include the following:**

- Careful consideration and communication to the medical team of all relevant risk factors (e.g., co-morbidities, surgical history, etc.) that may impact surgical management.
- Utilization of standardized surgical safety protocols (checklists) to ensure team situational awareness and improve verification practices.
- Consider altering technique, consulting a colleague, or promptly converting to an open approach when difficulties are encountered.
- Inform the health care team (hospitalists and nursing) as well as patients about any difficulties encountered or suspicion of a possible complication during surgery.