GALLBLADDER SURGERY GONE BAD

When a patient's bowel is perforated during gallbladder surgery, doctors must act quickly and aggressively to reverse the spiraling harm that can follow. If your client suffered an undetected perforation, be prepared to rebut the doctor's contentions that a delay in diagnosis was inevitable.

By || ROBERT D. KINGSLAND JR.

Gallbladder removal surgery (cholecystectomy) complications are a frequent source of litigation. One of the more common complications is bowel perforation that is not detected and repaired intra-operatively.[1] Time is of the essence in treating this complication because of the devastating consequences that can follow if treatment is delayed.[2]

A bowel perforation may occur when a surgeon places a trocar through the abdominal wall or when scissors or cautery used for dissection penetrate the bowel. When perforated, the bowel leaks intestinal content laden with toxic bacteria into the abdominal cavity, which leads to sepsis. Sepsis must be aggressively treated to prevent multiorgan failure and death. Bowel perforation constitutes a surgical emergency, and doctors often have a limited window of opportunity to respond to the crisis. The immediate priority is to return the patient to surgery. In addition, intravenous (IV) antibiotic therapy and fluids must be ordered stat.

Ninety percent of gallbladder removals occur via laparoscopy. Because laparoscopic surgery is performed through small incisions in the abdomen, it is minimally invasive and minimally disfiguring. Good visualization is crucial in cholecystectomies as with any surgery, and it can nearly always be achieved in an abdominal laparoscopic procedure. Surgeons introduce carbon dioxide into the abdomen, a process called insufflation, to expand the abdominal wall, creating a "chamber" to allow for proper visualization.[3]

Open procedures are normally performed only when adequate visualization of the gallbladder and cystic duct cannot be achieved through laparoscopy. If a laparoscopy is switched to an open procedure, it is referred to as a "conversion."[4]

Cholecystectomies, open and via laparoscopy, are most commonly performed by general surgeons. Laparoscopic surgery is performed with specialized surgical tools and is methodically scripted. Usually, three to four trocars, which act as portals for the placement of other instruments, are directed through the abdominal wall at various locations, including the area around the navel. A fiber-optic scope with a light is inserted through a trocar to allow visualization. Surgical instruments are used to lift the liver to access the gallbladder, and cautery and scissors are used to remove it.

Evaluating the Case

In evaluating a failed cholecystectomy case, first determine whether surgery was warranted. If cholecystectomy was not warranted because the patient could have been treated medically rather than surgically, for example, the surgeon normally is liable for the complications. Patients need surgery when they develop a gallbladder inflammation (cholecystitis), most commonly caused when one or more gallstones block the duct through which bile passes into the small intestines.

Symptoms of cholecystitis include severe right-side abdominal pain, sweating, fever, chills, nausea, vomiting, and abdominal bloating.[5] The examining physician should look for signs that commonly accompany cholecystitis, such as tenderness when the physician taps the bottom of the ribs (Ortner's Sign) and sensitivity below the shoulder (Boas's Sign). Diagnostic tools include abdominal ultrasonography and

RADIUS/SUPERSTOCK/GLOW IMAGES

cholescintigraphy scans to determine whether the gallbladder is inflamed and blood testing to indicate infection. CT scans or MRI may also be used.[6] The surgeon should always confirm cholecystitis before proceeding to surgery.

The complication rate with cholecystectomy is reportedly as high as 5 percent.[7] Complications include bleeding, infection, bile duct injury, and bowel perforation. Adhesions (scar tissue) in and around the gallbladder elevate the risk of a bowel perforation because they compromise the surgeon's visualization and ability to perform the dissection. Adhesions may be present in the abdomen from prior surgery or abdominal injury.[8]

If a surgeon inadvertently perforates the bowel during a laparoscopic cholecystectomy, it does not necessarily constitute a deviation from the standard of care. Similarly, a surgeon does not necessarily deviate from the standard of care when he or she fails to detect the perforation intraoperatively. Both of these risks are associated with the surgery. For example, a surgeon's inadvertent contact of the bowel with a cautery can cause what appears to be inconsequential harm that later deteriorates to a perforation.

Because bowel perforation is a known risk, surgeons deviate from the standard of care when they fail to respond timely to a patient who has symptoms of bowel perforation.[9] Prudent surgeons always monitor patients for postoperative complications.

A patient who has undergone a laparoscopic cholecystectomy is expected to make rapid and steady improvement postoperatively. Most patients are discharged within 24 hours. When a patient does not recover as rapidly as expected, doctors should suspect bowel perforation.[10] Perforation can sometimes be demonstrated with a CT scan, in which contrast material introduced into the stomach and intestines leaks through the perforation.[11]

A PATIENT WHO HAS SUSTAINED A BOWEL INJURY GENERALLY WILL SHOW EVIDENCE OF MARKED DETERIORATION RATHER THAN RAPID IMPROVEMENT.

However, the patient's condition may not permit time for a CT scan. If the patient's course reflects deterioration rather than rapid and steady improvement, the surgeon should presume bowel perforation until proven otherwise and act swiftly because of the dire consequences caused by delay.

A patient who has sustained a bowel injury generally will show evidence of marked deterioration rather than rapid improvement following surgery. The patient often experiences worsening and unrelenting pain. Fever and chills may be present, along with labored breathing, nausea, and vomiting. Abdominal distention frequently occurs.

This deterioration may occur in the immediate postoperative period, but it also can occur following discharge from the hospital. The patient normally shows signs and symptoms within five days following cholecystectomy.[12]

Patients with bowel perforation manifest abnormal vital signs. Tachycardia (rapid heart rate) and tachypnea (rapid breathing) will be present. As sepsis progresses, fever and hypotension appear. Patients may have elevated or subnormal white blood cell count, bandemia (elevated immature white blood cells), elevated liver chemistries, and elevated serum creatinine levels.[13] While some deteriorating postoperative cholecystectomy patients may not have sustained a bowel injury, the physician should be suspicious if the patient's course reflects these signs and symptoms.[14]

A postoperative patient's differential diagnosis may include other maladies such as ileus, bowel obstruction, pulmonary embolus, gastroenteritis, and hematoma.[15] Nevertheless, the diagnosis of bowel perforation—and accompanying sepsis—should be at the top of the differential diagnosis list.

In evaluating a case involving late diagnosis of bowel perforation, you must determine whether the surgeon, in the exercise of reasonable care, should have made the diagnosis at a point when the patient could reasonably have been expected to avoid some or all of the complications. If you have substantial proof of substandard care, you must focus on whether sufficient damages are tied to that care. Specific damages can include permanent intestinal injury that leads to a colostomy or ileostomy, amputation of extremities, brain damage, and death.

Practice Tips

When working up the case, the following steps can help you succeed.

Acquire records and films. Acquire all medical records and radiology films related to the history of the plaintiff's gallbladder complaints and subsequent treatment. Additionally, obtain all records generated in connection with the cholecystectomy and treatment for the bowel perforation and sepsis. If the plaintiff has a history of previous abdominal surgery or abdominal injury, acquire these medical records as well.

Review the literature. Review the medical literature on bowel perforation and sepsis to learn about the signs and symptoms and how this diagnosis is made. The alternative diagnoses mentioned earlier may frequently warrant inclusion in the differential diagnosis. You need to understand the signs and symptoms that accompany these

alternative diagnoses and understand why they warranted lesser priority for the patient's safety.

Understand the differential diagnosis process and application. The defendant will likely contend that identifying bowel perforation as the culprit underlying the patient's deterioration was difficult because the differential was lengthy. Develop a complete understanding of differential diagnosis and how its principles apply to bowel perforation and sepsis. In formulating a differential diagnosis, a physician must identify all the diagnoses—usual and unusual—that apply to a patient's history and examination and prioritize those that present severe or life-threatening consequences.

Bowel perforation and sepsis nearly always trump the other diagnoses because they are temporally connected to the cholecystectomy and a delay in diagnosis can be fatal. In summary, worst goes first. Nevertheless, it is acceptable to test the patient for alternative diagnoses if it doesn't delay surgery, IV antibiotics, and fluids.

You should also master the definitions of infection, bacteremia, sepsis, sepsis syndrome, septic shock, and multiorgan failure and understand the characteristics of each of these conditions. All of these conditions typically follow bowel perforation.

Watch cholecystectomy videos. Watch videos of cholecystectomies on websites such as YouTube to learn how surgeons perform this procedure and how bowel perforation occurs. This will help give you a vivid understanding of the subject matter, help you formulate questions for the defendant's deposition, and aid your ability to follow the defendant's narrative.

Summarize the record and prepare a timeline. Summarize the medical records, highlighting the signs and symptoms pointing toward or away from a diagnosis of bowel perforation and sepsis. Prepare a timeline of all significant post-cholecystectomy events. It should include the patient's vital signs post-cholecystectomy. These are indicators of the potential for successful medical intervention.

The summary and timeline will help you and your expert determine whether the delay in diagnosis constituted a deviation from the standard of care. The timeline should also help identify the window of opportunity for successful intervention, which goes to damages.

UNDERSTAND THE SIGNS AND SYMPTOMS THAT ACCOMPANY THESE ALTERNATIVE DIAGNOSES AND WHY THEY WARRANTED LESSER PRIORITY FOR THE PATIENT'S SAFETY.

Have a general surgeon review the records. Retain a qualified general surgeon to review the medical records and films for standard of care deviations and an assessment of damages. The review should focus on whether the plaintiff was an appropriate candidate for surgery pursuant to the standard of care and whether the bowel perforation diagnosis was timely made and treated within the standard of care. The review should also focus on whether timely intervention would have materially altered the plaintiff's outcome.

The Defendant's Deposition

The defendant's deposition is a major event in your case. When taking the defendant's deposition, it is important to establish

- the accuracy of the medical records and any additional facts not in the record.
- the step-by-step manner in which the defendant performed the surgery (to help identify how the bowel perforation occurred).[16]
- that bowel perforation and sepsis were on the differential diagnosis list when the patient deteriorated, rather than improved, after surgery.
- agreement about the signs, symptoms, and lab data that accompany bowel perforation and sepsis. Use medical literature to impeach the witness if he or she denies they are applicable. Most physicians are not likely to contradict commonly accepted information contained in current and reputable medical literature.
- that failure to timely diagnose bowel perforation and sepsis can lead to multiorgan failure and any specific consequences applicable to your case.
- that time is of the essence in treating bowel perforation and sepsis. Explore any indications that the defendant was lax in responding to the patient's deterioration, as jurors do not react favorably to physicians who are unreasonably tardy in responding to a patient.

Also, elicit each diagnosis that the

MORE ON PERFORATION CASES

Visit the Web pages below for additional information.

AAJ SECTION
Professional Negligence Section
www.justice.org/sections

AAJ LITIGATION GROUP
Medical Negligence Information Exchange Group
www.justice.org/litgroups

LITIGATION PACKET
Perforated and Nicked Bowels
www.justice.org/litigationpackets

AAJ EDUCATION PROGRAM
AAJ 2014 Annual Convention: Professional Negligence Section CLE Program
www.PlaybackAAJ.com

defendant considered, so the defendant is boxed in and committed to his or her differential list. Once the physician has given a complete differential diagnosis list, direct your questioning to show that the defendant's diagnoses either lacked sufficient confirming data, could have been quickly ruled out, or should have been assigned a lower priority. Question the defendant about his or her work-up plan to illustrate that the doctor failed to prioritize the most life-threatening diagnosis.

When you have achieved command of the applicable medicine and the pertinent facts of the case, you will have the knowledge that permits you to understand and explain the doctor's deviation from the standard of care. This plan involves significant preparation, but you will be sufficiently armed to successfully represent your client. T

Robert D. Kingsland Jr. *is a partner at Dempsey & Kingsland in Kansas City, Mo. He can be reached at robert@dandklaw.com.*

Notes

1. Another common complication from gallbladder surgery is common bile duct injury. For an excellent discussion of that subject matter, see B. Kent Buckingham, *When Laparoscopic Gallbladder Surgery Goes Wrong*, Trial 20 (May 1999).
2. *See e.g.* Michael S. Baggish, *How to Avoid Injury to Bowel During Laparoscopy*, 20 OBG Mgt. 46, 48 (July 2008); Michael S. Baggish, *Lessons in Timely Recognition of Laparoscopy-Related Bowel Injury*, 20 OBG Mgt. 55, 56 (July 2008); Jay T. Bishoff et al., *Laparoscopic Bowel Injury: Incidence and Clinical Presentation*, 161 J. Urology 887, 889 (Mar. 1999); T.C. Li et al., *Complications of Laparoscopic Pelvic Surgery: Recognition, Management, and Prevention*, 3 Hum. Reprod. Update 505, 508 (1997).
3. *See e.g.* John P. McGahan & Moni Stein, *Complications of Laparoscopic Cholecystectomy: Imaging and Intervention*, 165 Am. J. Roentgenology 1089, 1089 (Nov. 1995).
4. *See* Judy A. Shea et al., *Mortality and Complications Associated With Laparoscopic Cholecystectomy: A Meta-Analysis*, 224 Annals Surgery 609 (Nov. 1996).
5. Peter Schrenk et al., *Mechanism, Management, and Prevention of Laparoscopic Bowel Injuries*, 43 Gastrointestinal Endoscopy 572 (June 1996); *see also* William Silen, *Cholecystitis and Other Causes of Acute Pain in the Right Upper Quadrant of the Abdomen* in *Cope's Early Diagnosis of the Acute Abdomen* 131 (22d ed., Oxford U. Press 2010).
6. *See* Rivka Zissin et al., *Abdominal CT Findings in Small Bowel Perforation*, 82 Brit. J. Radiology 162, 162 (Feb. 2009); *see also* McGahan & Stein, *supra* n. 3, at 1093.
7. Nezam H. Afdhal & Charles M. Vollmer Jr., *Complications of Laparoscopic Cholecystectomy*, UpToDate (Jan. 2014), www.uptodate.com/contents/complications-of-laparoscopic-cholecystectomy?source=search_result&search=cholecystectomy&selectedTitle=2~145.
8. *See e.g.* Baggish, *How to Avoid*, *supra* n. 2, at 52.
9. For discussion about standard of care and causation in laparoscopic cholecystectomy cases alleging failure to timely diagnose and treat postoperative sepsis, *see Gelber v. Hamilton*, 2013 WL 867425 at **1–3 (Tex. App. 1 Dist. Mar. 7, 2013); *Cummings v. Jha*, 915 N.E.2d 908, 920–23 (Ill. App. 5 Dist. 2009); *see also Nethercott v. Dukehart*, 2011 WL 7029777 (Conn. Super. Dec. 21, 2011); *Fusilier v. Dauterive*, 764 So. 2d 74, 78-82 (La. 2000); *Jones v. Hernandez*, 880 So. 2d 245, 254–55 (La. App. 2 Cir. 2004).
10. Baggish, *How to Avoid*, *supra* n. 2, at 48; Baggish, *Lessons in Timely Recognition*, *supra* n. 2, at 58; Li et al., *supra* n. 2, at 509.
11. McGahan & Stein, *supra* n. 3, at 1093.
12. *See* Mohey El-Banna et al., *Management of Laparoscopic-Related Bowel Injuries*, 14 Surgical Endoscopy 779, 780 tbl. 2 (Sept. 2000).
13. Baggish, *Lessons in Timely Recognition*, *supra* n. 2, at 58; Schrenk et al., *supra* n. 5, at 573.
14. Baggish, *How to Avoid*, *supra* n. 2, at 48; Baggish, *Lessons in Timely Recognition*, *supra* n. 2, at 58; Li et al., *supra* n. 2, at 509.
15. Baggish, *Lessons in Timely Recognition*, *supra* n. 2, at 58; *see also* McGahan & Stein, *supra* n. 3, at 1092.
16. In a case I recently litigated, the defendant described a trocar placement that deviated from the standard of care because it was risky for the patient. Although no causation could be established between the patient's bowel perforation and the surgeon's negligent insertion of a trocar, this deviation raised doubt about the surgeon's expertise.