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Updated Evidence and Safety Focus Keep Guidance on Laparoscopic Biliary Tract Surgery Current

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An estimated 800,000 cholecystectomies are performed annually in the United States, [illegible] surgical procedures. (1-4) In their 2010 update, the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) have compiled a thorough set of guidelines on the more comprehensive term "laparoscopic biliary tract surgery." This update includes recommendations on the still evolving technology for a procedure that introduced general surgery to the world of laparoscopy. The guidelines address the full spectrum of surgical management, including the decision to operate, the safe approach to the intraoperative dissection, management of postoperative complications, and the emerging use of single-incision laparoscopic surgery.

A common theme in the guidelines is that of safety first. Noticeably, the term "safety" appears several times in the recommendation statements, e.g., "There are no demonstrable differences in the safety of open versus closed techniques for establishing access; decisions regarding choice of technique are left to the surgeon and should be based on individual training, skill, and case assessment. (**Level I, Grade A**)." In addition, while outlining the importance of endoscopic retrograde cholangiopancreatography (ERCP) in the armamentarium of biliary surgery, the guideline authors put this procedure in context safety-wise by reviewing statistics on the rare, but associated, morbidity and mortality rates. (5) The guideline also makes the point that there are many cases where intraoperative cholangiogram or magnetic resonance cholangiopancreatography (MCRP) may be the better, safer first option.

Although the SAGES guidelines are strongly based on the best available evidence, the results are not always conclusive. For some topics, such as the use of intraoperative cholangiogram or the decision-making for handling suspected choledocholithiasis, controversy exists. The

straightforward.

Even though the guideline was published as recently as January 2010, unfortunately, in at least one case, it may not be "current enough." The guideline recommends that normalization of pancreatic enzymes and clinical examination are needed prior to proceeding with same admission cholecystectomy for uncomplicated gallstone pancreatitis presentations; however, there is some evidence, published in April 2010, that argues to the contrary. (6) Pancreatic enzyme values may not correlate with severity of pancreatitis and the degree of retroperitoneal inflammation, which can limit exposure of critical structures during the dissection. As such, it may be reasonable to rely more on the clinical course.

In terms of emerging surgical approaches, such as reduced-port and single-incision cholecystectomy (also called single-incision laparoscopic surgery [SILS]), the guidelines address the single-incision approach and caution about the need for additional training. The recent American College of Surgeons Annual Clinical Congress Meeting had standing-room-only lectures and vendor displays on this topic. It is unknown whether the benefits in cosmesis will outweigh the possible, although likely marginal, increase in risks such as incisional hernia from the larger single incision or complications related to the differing visualization. A comparative effectiveness review of this new technique along with the standard four-port approach may be warranted. The guidelines were silent on natural orifice translumenal endoscopic surgery (NOTES), using instruments and a camera through a natural orifice to perform surgery. In general, it appears this approach has taken a back seat to single-incision laparoscopic surgery.

Overall, the updated SAGES guidelines are a concise summary of a large amount of data for one of the most common surgical procedures, which will help educate and guide surgeons and surgeons in training. One unintended use of these surgical guidelines is that another group, lawyers, may also use them to educate themselves and to obtain literature to build cases. (7) That being said, the guidelines are an evidence-based and thoughtful picture of modern practices for laparoscopic biliary tract surgery.

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Disclaimer

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Potential Financial Conflicts of Interest

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