Letter to the editors

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Received: 10 May 2013 / Accepted: 12 June 2013 / Published online: 27 July 2013
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In their editorial, “Laparoscopic Cholecystectomy: First Do No Harm; Second, Take Care of Bile Duct Stones” [1], the authors call for extensive retraining of surgeons to reduce bile duct injuries, which afflict 3,000 patients every year in the United States. At the same time, they readily admit “it is unlikely that bile duct injuries will ever be completely eliminated because inflammation and anatomic variation distort and obscure the anatomy” [1].

Perhaps we should follow the example of our gynecologic colleagues, who in some cases avoid excision of the uterus, with its attendant risk of injury to the ureters, by using endoluminal ablation of the uterine mucosa. Although heat can be used in the thick-walled uterus, the thin gallbladder requires ablation to be tissue selective. Water jets were shown to be tissue selective in removing mucosal tissues down to a collagen layer in the esophagus and stomach [2]. Preliminary work has likewise demonstrated that water jets can selectively ablate the gallbladder mucosa in live animals and fresh human gallbladder specimens.

An endoluminal operation on the gallbladder might proceed as follows. A special trocar is attached to the fundus of the gallbladder. The stones are washed out or crushed, and the mucosa, together with the muscle (containing pockets of mucosa—Rokitansky-Aschoff sinuses), are ablated down to the collagen-containing adventitia by water jets. The lumen will become obliterated by scar tissue. There will be no dissection or transection of the cystic duct: “Cut nothing, injure nothing.”

In 2007, two Harvard surgeons wrote a review entitled “Biliary Injury... Why Still A Problem?” In this review they lamented: “We can expect another 3,000 biliary injuries to occur this year. All agree, that is unacceptable... This is a lingering health care and financial disaster sorely in need of a lasting solution” [3].

Perhaps replacing excision with a single-trocar endoluminal operation will allow us to provide a lasting solution to the “lingering disaster” of bile duct injury and thus to adhere better to the mandate that we “first do no harm” to our gallbladder patients.

Disclosures Robert C. Hall has no conflicts of interest or financial ties to disclose.

References

1. Berci G, Hunter J, Morgenstern L, Arregui M, Brunt M, Carroll B, Edye M, Fermelia D, Ferzli G, Greene F, Petelin J, Phillips E, Ponsky J, Sax H, Schwaitzberg S, Soper N, Swanstrom L, Traverso W (2013) Laparoscopic cholecystectomy: first do no harm; second, take care of bile duct stones. *Surg Endosc* 27:1051–1054
2. Kroh M, Hall RC, Udumsawaengsup S, Smith A, Yerian L, Chand B (2008) Barrett’s esophagus: preliminary results of a new technique. *Surg Endosc* 22:2498–2502
3. Vollmer CM Jr, Callery MP (2007) Biliary injury following laparoscopic cholecystectomy: why still a problem? *Gastroenterology* 133:1039–1041

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