World J Surg (2014) 38:355–356
DOI 10.1007/s00268-013-2344-7

World Journal of Surgery

INVITED COMMENTARY

Long-term Outcome of Patients with Acute Cholecystitis Receiving Antibiotic Treatment: A Retrospective Cohort Study

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Published online: 27 November 2013

This retrospective study of 947 patients with acute cholecystitis (AC) by Wang et al. [1], published in this issue of *World Journal of Surgery*, has produced some interesting findings and begs a number of questions. Having excluded those patients with pancreatitis, choledocholithiasis, and biliary tract malignancy, the authors were left with 779 patients who needed treatment for AC alone. Early cholecystectomy was the treatment employed for approximately half (399) of those patients. The remainder were managed initially either by cholecystostomy (158) or by antibiotic therapy alone (226). It is assumed that cholecystostomy was performed mainly in patients deemed unfit for cholecystectomy, and therefore in this group interval cholecystectomy might not be expected.

In the remaining 226 patients, however, it is reasonable to think that they would be offered interval surgery, and this brings us to the first interesting observation: only about one third (80) of these patients actually had surgery. This echoes the findings reported by David et al. [2] in a study from England showing that just over half of all patients who did not have early cholecystectomy did not undergo surgery later either.

The second useful observation is that follow-up (median: 308 days) of the patients studied by Wang et al. shows that the rate of recurrence of cholecystitis was 13.8 %. This is perhaps much lower than many surgeons might expect, and in some eyes at least, it might not justify a blanket recommendation for surgery.

Much surgical literature is taken up with which operation to perform and when to do it. Surgery for cholecystitis is no exception. The literature is saturated with studies of open vs laparoscopic cholecystectomy and early vs delayed surgery for acute biliary symptoms, but there has been precious little study of whether or not to operate at all. Even the Tokyo guidelines [3], which discuss most aspects of diagnosis and management of acute biliary disease, are curiously reticent regarding the acceptability of nonsurgical management. That moderate or severe AC often requires surgical intervention is not disputed, but what of mild AC or moderate AC that settles quickly without intervention? Is surgery mandatory? What are the risks of recurrence? And how severe might any recurrence be?

This study by Wang et al. suggests that, in Taiwanese patients at least, medium-term conservative management of resolved AC may be justified by a relatively low risk of recurrence. Those who work in places where long waiting lists for elective surgery are not unknown (like us in the UK, for example) are aware of the phenomenon characterized by patients who suffer repeated attacks of AC but eventually become symptom-free as the process "burns out." At operation the gallbladder is found to be a small fibrosed nubbin. Recently some workers from the University of Aberdeen have expressed an interest in the possibility that surgery might reasonably be avoided following resolution of AC [4], and further studies of this situation may ensue.

Cholecystectomy is generally perceived to be safe, but what about "post-cholecystectomy syndrome" or taking patients to surgery in facilities where expertise is deficient? A conservative approach to the management of AC may

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produce a reduction in the morbidity from surgery—especially in high-risk patients—matched by a reduction in health care costs, with an acceptable risk of recurrence of AC. At the very least, patients might be better informed about the magnitude of the risk of recurrent AC that the surgery is designed to avert. The drivers that push surgeons to offer intervention for any "surgical" condition are many, and they vary according to culture and economics. Perhaps we need to resist more.

References

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