

Feasibility of the laparoscopic appendicitis score

Zhihong Liu · Yiping Lu

Received: 6 February 2013 / Accepted: 4 March 2013 / Published online: 24 August 2013
© Springer Science+Business Media New York 2013

To the Editor,

An online first article of *Surgical Endoscopy* by Hamminga et al. [1] is entitled “Evaluation of the Appendix During Diagnostic Laparoscopy, the Laparoscopic Appendicitis Score: A Pilot Study.” The authors present the “laparoscopic appendicitis score,” which can be used to evaluate the appendix during diagnostic laparoscopy, with high positive and negative predictive value. However, we discuss several concerns about their study.

1. The presence of fecaliths may cause occlusion of the appendix lumen, which is a common reason for the appendicitis [2]. Furthermore, appendiceal fecaliths may be a cause of right iliac fossa pain in the absence of obvious appendiceal inflammation [3]. The presence of fecaliths also is associated with earlier and higher rates of appendiceal perforation in pediatric patients with acute appendicitis [4]. We think the authors may refer to the presence of fecaliths as a part of the laparoscopic appendicitis score.
2. The authors report 25 cases of normal appendix in their diagnostic laparoscopic series, but the details of the conditions that caused the symptom of right quadrant abdomen pain were missed. Many diseases, such as gastric perforation and diverticulum of ileum perforation, may cause right quadrant abdomen pain. In these diseases, as a part of diffused peritonitis, the mesentery of the appendix and the appendix itself may be thickened. According to the laparoscopic appendicitis score, we appendectomy should be performed for these

patients. Conversely, it is controversial to perform appendectomy for these patients.

3. The time between symptom onset and operation is important to the appearance of the appendix. In the early stage of appendicitis, thickening of the appendix and its mesentery is not apparent. In this circumstance, a possibility exists that the patients may be cured by conservative therapy and categorized as having a normal appendix. We therefore advise the authors to define the time between symptom onset and diagnostic laparoscopy for the laparoscopic appendicitis score.

Sometimes, it is difficult to determine whether to perform appendectomy during the diagnostic laparoscopy. The laparoscopic appendicitis score presented by Hamminga et al. [1] is an important instruction for surgeons. In our opinion, the presence of fecaliths should be considered as part of the laparoscopic appendicitis score.

Disclosures Zhihong Liu and Yiping Lu have no conflicts of interest or financial ties to disclose.

References

1. Hamminga JTH, Hofker HS, Broens PMA, Kluin PM, Heineman E, Haveman JW (2012) Evaluation of the appendix during diagnostic laparoscopy, the laparoscopic appendicitis score: a pilot study. *Surg Endosc* doi:10.1007/s00464-012-2634-4
2. Raahave D, Christensen E, Moeller H, Kirkeby LT, Loud FB, Knudsen LL (2007) Origin of acute appendicitis: fecal retention in colonic reservoirs: a case control study. *Surg Infect* 8:55–62
3. Grimes C, Chin D, Bailey C, Gergely S, Harris A (2010) Appendiceal faecaliths are associated with right iliac fossa pain. *Ann R Coll Surg Engl* 92:61–64
4. Alaudeen DI, Cook M, Chwals WJ (2008) Appendiceal fecalith is associated with early perforation in pediatric patients. *J Pediatr Surg* 43:889–892

Z. Liu · Y. Lu (✉)

Department of Urinary Surgery, West China Hospital, Sichuan University, No 37, Guo Xue Xiang, Chengdu 610041, Sichuan, China
e-mail: yipinglu@163.com