



and Other Interventional Techniques

Laparoscopy for every acute appendicitis?

The authors reply

We thank Drs. Slim and Chipponi for their comments on the EAES (European Association for Endoscopic Surgery) guidelines for acute abdominal pain [4]. Admittedly, the advantages of laparoscopic over conventional appendectomy are small. The currently available data from more than 50 randomized controlled trials indicate that laparoscopic appendectomy reduces the number of wound infections, but increases the likelihood of an intraabdominal abscess. In a hypothetical cohort of 100 patients, the use of laparoscopic rather than open surgery will avoid about four extra cases of wound infection, but result in one additional intraabdominal abscess.

These are the facts, but the problem lies in their interpretation. Some surgeons (and also patients) see a wound infection as a minor event of low clinical importance, whereas others judge it to be a costly and potentially dangerous complication. Therefore, it is quite possible for two guidelines on the same issue to reach different conclusions. Drs. Slim and Chipponi state that “from the patient’s perspective more intraabdominal abscess could not be counterbalanced by less wound infection,” but there is little evidence available to support this statement. Such evidence would require a formal assessment of patient preferences, which has never been performed in prospective studies.

Furthermore, several nonrandomized studies in the recent literature have questioned whether the increased risk of intraabdominal abscess formation still is a clinically relevant problem [2]. It has been argued that careful surgical technique (e.g., use of a stapling device instead of Roeder loops, thorough abdominal cleansing) reduces the risk of abscess formation to a minimum. This chain of argumentation can be supported by data from five randomized trials confirming a lower abscess rate after stapled dissection than after looped dissection of the appendiceal base [1].

Besides infectious complications, however, other clinical end points must be examined. Most importantly, laparoscopic appendectomy allows for a quicker and less painful recovery. This difference is small (and gets even smaller in blinded trials), but has been confirmed in a large number of trials and epidemiologic studies [3]. With regard to diagnostic laparoscopy, we agree that only patients with unclear symptoms (mainly young females) are likely to benefit from this procedure. However, the

evidence on this issue was produced before computed tomography (CT) scanning was widely used. Therefore, we agree with the comment that a CT scan should be performed before diagnostic laparoscopy is considered. However, further studies including cost-effectiveness analyses are needed to resolve this controversy.

In conclusion, we do not believe that conventional appendectomy currently is an outdated operation, but the net benefit of laparoscopic appendectomy favors it as the technique of choice. Therefore, although the advantage is small, the panel chose to recommend laparoscopic appendectomy as the standard technique for the vast majority of patients (including perforated cases [5]). We agree that certain subgroups probably will have very little if any benefit from laparoscopic appendectomy, but it is difficult, from both a medical and an organizational perspective, to tailor the type of surgery to the individual patient.

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