Safety of single-incision cholecystectomy

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To the Editor,

I read with interest the systematic review by Arezzo et al. [1], and congratulate the authors for their valuable efforts to perform a timely meta-analysis on the role of single-incision access for cholecystectomy. As the title of their article indicated, the review aimed to assess the “safety” of this new approach. Cholecystectomy is regarded as safe because it avoids bile duct injuries, which remain a surgical risk in laparoscopy. A recent review [2] that included all published studies (not only randomized trials, as in the Arezzo et al. review) showed that single-incision cholecystectomy can be associated with an increased risk of bile duct injury and was it gave a clear word of caution. In contrast, the review by Arezzo et al. found no increased risk with the single-incision approach. However, I fear that because of the number of patients included the studies reviewed ($n = 996$), the authors cannot assert with a high level of confidence that single-incision access is really safe. Because bile duct injuries are a relatively uncommon event, it has been calculated that many thousands of patients (depending on the considered rate of the event) should be included in any trial or meta-analysis evaluating the risk of bile duct injury [3]. Hence, while this article is a systematic review of randomized trials, it absolutely does not demonstrate (as it has been

presented in the title) the safety of the single-incision approach to cholecystectomy.

In the lack of proven safety (due to the lack of power) or superiority in terms of postoperative outcomes [2, 4], one cannot consider single-incision surgery as evidence-based. Only future properly sized randomized controlled trials will demonstrate (or not) that this approach is really safe and will become the preferred approach for cholecystectomy in daily practice.

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