

Risk Criteria for Scientific Researches. For Whom the Bell Tolls?

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Received: 26 November 2013 / Accepted: 11 June 2014 / Published online: 19 June 2014
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To the Editor:

We read the article of Kang et al.¹ entitled “A Nationwide Analysis of Laparoscopy in High-Risk Colorectal Surgery Patients” with great interest. The investigators used similar criteria to identify high-risk patients like we firstly defined in our previous study.² In our study, we defined five major criteria including cardiac, pulmonary, renal or liver disease, and diabetes mellitus and three minor criteria including age >70 years, body mass index >30 kg/m², and smoking. The minor criteria were exactly the same in those two studies, but Kang et al. did not determine all cardiac diseases as a major risk factor; rather, they determined congestive heart failure, valvular heart disease, and anemia as separate major risk factors. What may be the explanation of excluding other cardiovascular diseases like the presence of cardiac ischemia, abdominal aorta aneurism, or cardiomyopathy, etc.? However, defining all hematological diseases as a major risk factor instead of anemia alone might be more appropriate.

The authors defined high-risk patients as “those individuals that had at least one minor plus one major risk factor or two major risk factors” like we did in our study. They excluded urgent and emergent cases to remove bias favoring open cases and inflammatory bowel diseases not to represent a special population with several confounders and unmeasured variables (chronic use of steroids, immunosuppression, etc.). This point of view might be useful in studies dealing with high-risk patients.

They did not investigate the major morbidities in this study. In our study, myocardial infarction, cardiac arrhythmias, cerebrovascular accident, respiratory failure, anastomotic leak, intra-abdominal abscess, anastomotic stricture, internal hernia, fascia dehiscence with evisceration, fistula, pulmonary emboli, and acute renal failure were defined as the major morbidities and might be useful for similar studies investigating major morbidities. Transient partial small bowel obstruction, ileus, nonoperative thrombophlebitis, bleeding, wound infection, wound hematoma, urinary retention, urinary tract infection, and postoperative fever were defined as the minor morbidities. These major and minor morbidity criteria are more accurate to investigate the mortality and morbidity in retrospective studies dealing with high-risk patients. In a prospective study, there are such other dynamics to define morbidity and mortality. These criteria were defined in detail in another prospective study.³

In this letter, we discussed the criteria to define high-risk patients, inclusion and exclusion criteria, and major and minor morbidities in surgery and anesthesia.

Funding This study received no internal or external funding.

Conflict of Interest The authors have no conflicts of interest to declare.

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