

## Reply to: Re: No differences in short-term morbidity and mortality after robot-assisted laparoscopic versus laparoscopic resection for colonic cancer: a case-control study of 263 patients (Surg Endosc 2013)

Neel Maria Helvind · Jens Ravn Eriksen · Anders Mogensen ·  
Buket Tas · Jesper Olsen · Mads Bundgaard ·  
Henrik Loft Jakobsen · Ismail Gögenür

Received: 5 April 2013 / Accepted: 25 April 2013 / Published online: 30 May 2013  
© Springer Science+Business Media New York 2013

We thank Dr. Colantonio for his comments. We agree that there is an overlap in the literature where “case-control” is inappropriately used in studies where the more correct term would be “retrospective cohort” study. We thank Dr. Colantonio for bringing this to attention. We also agree with Dr. Colantonio that an obvious limitation of retrospective study designs such as ours is the difference in risk factors between the observed groups. However, when looking at relatively new techniques (such as robot-assisted colectomy for colon cancer), the small number of surgical cases can become an obstacle for the use of analytic methods, such as stratification and matching.

We agree that restriction with regard to surgeon experience would have been preferable, but because our hospital is a teaching hospital, a large part of the laparoscopic colectomies are performed by junior surgeons under supervision. Restriction would have entailed a significant risk of selection bias in favor of the robotic colectomies, because one can assume that the patients selected for laparoscopic operation by a senior surgeon would have more advanced cancers, older age, and poorer health status with regard to comorbidity. In contrast, all patients were eligible

for robotic surgery and were selected for robotic surgery on the basis of robot and surgeon availability.

We addressed these limitations in our discussion, and we emphasized that our outcomes, including the shorter surgical time in the robot-assisted laparoscopic colectomy group, could indeed be affected by them. Our study concluded that “robot-assisted laparoscopic colonic resection is a safe and feasible alternative to traditional laparoscopic resection for colonic cancer.” We do not dissuade surgeons from using robot-assisted laparoscopy for colonic resection because we believe that randomized clinical trials of robot-assisted laparoscopic colectomy versus laparoscopic colectomy, larger than those currently available, could yet prove that the superior technical possibilities of robot-assisted surgery will translate into improved functional and oncological outcomes in patients with colon cancer.

**Disclosures** Neel Maria Helvind, Jens Ravn Eriksen, Anders Mogensen, Buket Tas, Jesper Olsen, Mads Bundgaard, Henrik Loft Jakobsen, and Ismail Gögenür have no conflicts of interest or financial ties to disclose.

---

N. M. Helvind (✉) · J. R. Eriksen · A. Mogensen · J. Olsen ·  
M. Bundgaard · H. L. Jakobsen · I. Gögenür  
Department of Gastrointestinal Surgery, Copenhagen University  
Hospital, Herlev, Denmark  
e-mail: neelhelvind@gmail.com; neelhe@stud.ku.dk

B. Tas  
Erasmus University, Rotterdam, The Netherlands