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EDITORIAL

More or LESS

R. Bergamaschi

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LESS (Laparo-endoscopic single-site surgery) is an acronym coined by the Laparoendoscopic Single-Site Surgery Consortium for Assessment and Research (LESSCAR) [1] to describe surgery performed through a single port. This concept differs from laparoscopic surgery performed through multiple ports. Yet, readers might be surprised to know that there has not been a precise definition of a port. Port size may vary from 2 mm to 12 cm not withstanding the fact that laparotomy is the oldest single site. The objective of this editorial is to present a critical insight into the role of LESS performed percutaneously (with pneumo-peritoneum) in diseases of the colon and rectum. However, any aspects of LESS with transluminal access and/or without specimen will not be addressed herein.

There are at least three categories for discussion. Although there are currently no universal regulations governing the implementation of new surgical procedures, innovation in surgery should not occur through "gutsy" papers [2]. The American College of Surgeons Committee on Emerging Surgical Technologies and Education Statement may be inadequate due to its voluntary nature [3]. This holds true in light of the evidence that surgeons largely do not seek prior institutional review board (IRB) approval and there is concern that patients may serve as unwitting research subjects [4]. As much as there is a need for innovation in surgery, such innovation must be implemented in accordance with the rules of evidence [5]. Knowing such rules means understanding that the random operation design is biased in favor of the surgeon's pre-trial routine surgical access and technically simple procedures [6]. LESS is neither. Therefore, the question is: what study designs are available to minimize the inclusion of the learning curve into a randomized controlled trial (RCT)? The process of care study is a design that prospectively measures what is done to the patient (in addition to what happens to the patient, i.e., outcomes) [7]. Process of care studies should be carried out prior to any RCT in order to minimize the inclusion of the learning curve. The study by Geisler and Garrett [8] is a prospective non-randomized series of patients undergoing LESS for diseases of the colon and rectum. The authors should be commended for obtaining IRB approval and candidly reporting on 83 elective resectional cases performed in less than 2 years. Unfortunately, Geisler and Garrett's [8] study did not quite adhere to the process of care study design as no details of methodology may be modified once a study is underway. Candidates for intervention should be selected on the basis of pre-determined criteria. External validity must be proven by more than one surgeon reproducing outcomes by means of the same methodology. The question remains regarding to the true motive behind implementation of LESS surgery. Partnership with industry, marketing in a competitive non-government-run health care system, or self-promotion to boost an academic career in a government-run health care system are all unacceptable examples of potential forces. If the goal truly is patient benefit, then efforts should be underway to identify colorectal diseases where LESS can offer overt clinical advantages with minimal risk. Inflammatory bowel disease (IBD) patients with pre-existing ileostomy and/or anticipated need for proximal diversion are potential candidates for LESS with extra-umbilical access at the abdominal wall defect intended for specimen extraction and diversion. In fact, in IBD patients, there is a high likelihood for re-operation in a lifetime. In accordance with the LESSCAR consensus statement [1], the bar for considering LESS in colorectal cancer patients must be much higher.

R. Bergamaschi (✉)
Division of Colon & Rectal Surgery, State University of New York, Stony Brook, NY, USA
e-mail: rcmbergamaschi@gmail.com

More or less, at this point in time, it is not possible to predict what LESS will become [9].

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