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Commentary on 'Robotic *vs* laparoscopic rectal surgery in high-risk patients'

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Patient related short-term benefits of minimally invasive surgery (such as less pain, faster recovery and shorter hospital stay) are lost with conversion to an open approach. Over time, the conversion rates for minimal invasive rectal cancer surgery decreased from 34% (CLASICC trial) [1], to 16% (COLORII) [2] and to 8.1% (ROLLAR), respectively 0% in this study (compared to 5% for laparoscopy, $P = 0.43$). In addition, Jamil *et al.* found significantly shorter operating time and hospital stay including a higher sphincter preservation rate in the robotic assisted group. However, the choice of abdominoperineal resection not only depends on the tumor location, but also on anal function and the patient's preference.

Reasons for conversion can be tumor or patient related. In their study, Jamil *et al.* included patients with several risk factors such as male gender, cancer < 8 cm from the anal verge, BMI > 30 kg/m², pre-operative radio-chemotherapy and previous abdominal surgery. However, not all patients fulfilled all of the above criteria. Only approximately 50% of cancers were < 8 cm from the anal verge and the median BMI in both groups was 27 kg/m². The narrow male pelvis with a fatty mesentery can be very challenging for TME surgery. It would be interesting to compare today's experienced laparoscopic surgeon to a robotic approach and to transanal TME surgery (taTME) in patients

fulfilling all of these risk-factors. The concept of taTME not only includes better pelvic nerve preservation and improved distal margins, but also lower conversion rates because the difficult low pelvic dissection is performed through the anus under optimal view without big angulations of instruments. TaTME had a low conversion rate due to pelvic anatomical reasons in 2.8% in a recently published registry analysis [3]. With low conversion rates patients would keep all the advantages of a minimal invasive approach. At the end, however, ontological outcome remains the most important issue.

Dieter Hahnloser

Associate Editor
Service de chirurgie viscérale, CHUV, CH-1011, Lausanne, Switzerland
E-mail: dieter.hahnloser@chuv.ch

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