Robot-assisted versus conventional laparoscopic fundoplication: short-term outcome of a pilot randomized controlled study

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We read with great interest the recent *Surgical Endoscopy* publication entitled “Robot assisted versus conventional laparoscopic fundoplication: short-term outcome of a pilot randomized controlled study”. The authors come to the conclusion that—besides shortened operation time—the application of the operation robot does not reveal a further benefit in laparoscopic fundoplication. In 2002 we were able to perform a pilot study on robot-assisted laparoscopic Toupet fundoplication with the DaVinci® surgical system (Intuitive Surgical, Mountain View, Calif., USA) with a 6-month follow-up and came to the same conclusion except for an even longer set-up and operating time in our series [1]. Despite demanding experience of the surgeon in order to obtain a good functional outcome the performance of a laparoscopic fundoplication does not require the four main advantages of robot assisted laparoscopic surgery: it is not an operation that cannot be performed laparoscopically without the robot [2]; it does not require microscopic view and movements of the arms; anatomically it is not an operation in a remote or narrow operating field [3, 4]; and in a normal laparoscopic fundoplication no complex manoeuvres such as creation of an intracorporeal anastomosis or complex suturing [5] are needed.

Improved ergonomics for the surgeon and a shorter set-up and operation time as a matter of training (as demonstrated in the above mentioned paper) do not outweigh higher operative costs as long as no further clear advantage is proven.

Laparoscopic redo fundoplications [6] often consist of an even more demanding intraoperative situation where the operation robot could allow for a more precise dissection, avoiding inadvertent lacerations (e.g., lacerations of the vagus nerve), and therefore lead to a better outcome. For training purposes in order to be prepared for such more demanding applications the performance of robot-assisted laparoscopic fundoplications seems justified.

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