Research Perspective on

Patient-Related Functional Outcomes After Robotic-Assisted Rectal Surgery Compared With a Laparoscopic Approach: A Systematic Review and Meta-analysis

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GAPS

Previous literature emphasized the importance of robotic surgery and argued for comparable oncologic outcomes in cancer care. Shared decision-making should be employed when a surgical approach could result in adverse outcomes that affect the patient's quality of life. Shared decision-making is highlighted by discussing possible complications and identifying what the patients value more when oncologic outcomes could result in sexual or urinary dysfunction. The question of publication bias to report equivalent functional outcomes is a concern when most analyses use heterogeneous data due to different tools or questionnaires to evaluate sexual and urinary dysfunctions. The same concern is valid when the presented data do not include preoperative risk factors and gender differences.

IMPACT

This publication is the first review that highlights the possibility of a positive impact of robotic surgery on functional outcomes. The authors highlighted the value of ensuring data homogeneity when comparing the 2 platforms and attempted to simplify the outcomes reported between the studies to make them comparable. Robotic rectal surgery resulted in better sexual and urinary functional outcomes in most published studies. However, some of the reported outcomes were not sustainable after 12 months of surgery, and there was no difference in either bowel-related outcomes or global quality-of-life scores.

IMPLICATIONS

Although this review highlights the value of robotic surgery in offering a more precise operative platform, it did not consider the surgeon's experience or the decision-making of using a robotic versus laparoscopic platform. Preoperative factors like neoadjuvant radiotherapy could mediate worse outcomes, thus disregarding the platform of choice. Although the future of robotic surgery is exciting, it is too early to conclude that it offers better functional sexual and urinary outcomes in the setting of rectal surgery.

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