



# Robots for rectopexy: help or hindrance?

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Awareness of the impact of pelvic floor dysfunction on quality of life is increasing worldwide. Optimum techniques for correction of external and internal prolapse to improve obstructed defaecation syndrome (ODS) and faecal incontinence are widely sought but, as yet, poorly defined. No clear algorithm exists (even within institutions) as to how best to manage these complex problems. Increasingly, pelvic floor centres are establishing multi-disciplinary meetings to allow meaningful discussion of patients requiring input from multiple specialties (colorectal surgeons, urogynaecologists, gastroenterologists, physiotherapists and clinical nurse specialists).

Perineal procedures, popular a few decades ago, are in decline because of reports of high recurrence rates, and are mostly restricted to the few frail, debilitated patients not medically fit for laparoscopy. At the same time, laparoscopic ventral rectopexy has risen in popularity and has found its place as the default operation in Europe for treatment of prolapse, ODS and incontinence.

With broad availability of surgical robots in major institutions, colorectal applications are at the forefront of our minds (1). Yet, like laparoscopy thirty years ago, the “flat earth, ante-deluvians” among us are sceptical of its advantages. In an age of limited fiscal resources, any excessive outlay must be justified to teams of managers, purchasers and financial controllers by a financial or clinical offset to the hospital or patient.

Can the robot improve outcomes, shorten hospital stay or optimize the patient experience when utilized for rectopexy? We read with interest the recent paper entitled “Daycase robotic ventral rectopexy compared with daycase laparoscopic ventral rectopexy: a prospective study”

published from Michallon University in Grenoble (2). The authors endeavoured to answer these questions and performed an elegant, albeit small, non-randomised case-controlled study comparing daycase laparoscopic with robotic assisted ventral rectopexy for full thickness prolapse and high grade enterocele.

Commendably, rectopexies were performed as selected day case procedures so the robot could not shorten hospital stay. Measured by visual analogue scale, robotic patients reported significantly ( $P=0.45$ ) less pain than those having undergone laparoscopic procedures, although analgesia requirements appeared comparatively high. The authors reported use of a fourth 5mm port, but with temporary fixation of the sigmoid colon to anterolateral abdominal wall, rectopexy can safely be performed using 3 ports (3).

The head to head comparison was illuminating. The authors are to be commended on their costing methodology, including room occupancy and median human resource costs which are frequently overlooked. Use of the robot was three times more expensive than conventional laparoscopic rectopexy, with none of the cited advantages offsetting the excess outlay.

So, is robotic ventral rectopexy a feasible alternative to the laparoscopic approach? Would its universal introduction lead to improved outcomes, increased patient satisfaction, fewer intra-operative complications, shorter length of stay or fewer recurrence rates? None of these advantages has been demonstrated, albeit at short term follow up. To quote Michelangelo “The greatest danger for most of us is not that our aim is too high and we miss it but that it is too low and we reach it”, let us continue to innovate and strive to improve patient journeys in every way.

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