





# Changing Trend of Rectal Prolapse Surgery in the Era of the Minimally Invasive Surgery

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With the life span of the general population increased, rectal prolapse in elderly patients became a major concern in terms of the decision of the treatment modalities and quality of life of patients. Most elderly patients with rectal prolapse in the past received a perineal approach with the fear of general anesthetic complications rather than the abdominal approach. However, improvement in perioperative care in anesthesiology and minimally invasive surgery, the trend of surgical management of rectal prolapse is rapidly changing. Minimally invasive surgery including the laparoscopic and robotic surgeries showed comparable short-term outcomes even in elderly patients. Recently published guidelines also recommended a laparoscopic abdominal approach for the management of rectal prolapse.

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With the increasing average life span of the population, a larger number of elderly patients require medical attention. Rectal prolapse is a disease of older women after giving birth and can be associated with concomitant pelvic floor disorders, such as pelvic organ prolapses and fecal incontinence. Patients with rectal prolapse not only suffer from the symptoms themselves but also experience a worsening quality of life and social isolation. Nonoperative management, such as medication or biofeedback, may relieve the symptoms; however, surgery is the only way to cure the symptoms.

More than 100 operations have been introduced to manage rectal prolapse in the surgery textbook. No single approach has been proven superior to another. Traditionally, there are two surgical approaches, perineal and abdominal. Many published guidelines recommend a perineal approach for unhealthy patients with general anesthesia or abdominal procedures.<sup>1-3</sup> On the other hand, with the improvement of perioperative care, the absolute contraindication to general anesthesia is decreased markedly.

Generally, the perineal approach shows less morbidity but a higher recurrence rate. In contrast, the abdominal approach shows increased morbidity but a lower recurrence rate. The abdominal approach meant open surgery in the past. Minimally invasive surgery has already shown improved shortterm outcomes, such as less pain, shortened length of stay, and a faster return to work. The traditional abdominal rectal prolapse approach has been changing rapidly. Laparoscopic or robotic approaches are being adopted more commonly.<sup>4-6</sup> Recent randomized studies showed no differences in morbidity or recurrence rates between perineal and laparoscopic abdominal approaches.<sup>7</sup> New guidelines also recommend laparoscopic or minimally abdominal approaches for rectal prolapse surgery.<sup>1-3</sup> In this issue, a retrospective study of the surgical treatment of rectal prolapse also showed this changing trend of surgical management.<sup>8</sup> Although the number of patients is not enough to make any solid conclusions, among 18 abdominal approaches, laparoscopic approaches comprised 16 operations (88.9%). Surgical methods were variable; laparoscopic rectopexy with mesh procedures was most common, followed by laparoscopic resection rectopexy. The recurrence rate after the primary operation was 12.8%, whereas that of repeated operation was 0%. One of the main limitations of this study was a lack of long-term follow-up and functional outcomes after surgery.

Research concerning rectal prolapse in Asian countries is scarce. Most of them were small case series.<sup>5,6,9-11</sup> Asian populations generally show a lower body mass index (BMI) than western populations. The benefit of minimally invasive surgery is more prominent in low BMI populations. More solid evidence based on well-designed clinical trials will be needed.

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### **CONFLICT OF INTEREST**

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