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List of Abbreviations

Abbreviation	Meaning
ACRIN	: American College of Radiology Imaging Network
AIDS	: Acquired Immunodeficiency Syndrome
AIN	: Anal intraepithelial neoplasia
AJCC	: American Joint Committee on Cancer
APC	: Associated polyposis conditions
ATZ	: Anal transition zone
CBC	: Complete blood count
CEA	: Carcinoembryonic antigen
CEA	: Carcinoembryonic antigen
CIN	: Cervical intraepithelial neoplasia
CRC	: Colorectal cancer
CT	: Computed tomography
DAE	: Digital anal examination
DALMs	: Dysplasia-associated lesions or masses
DRE	: Digital rectal examination
EPIC	: European investigation into cancer

FAP	: Familial adenomatous polyposis
FOBT	: Faecal occult blood test
HGAIN	: High-grade anal intraepithelial neoplasia
HIV	: Human immunodeficiency
HNPCC	: Hereditary non-polyposis colorectal cancer
HPV	: Human papillomavirus
HSIL	: High-grade squamous intraepithelial lesions
IBD	: Inflammatory bowel disease
IRC	: Infrared coagulation
MAP	: MUTYH-Associated polyposis
MR	: Magnetic resonance imaging
MSM	: Men who have sex with men
NSAIDs	: Non-steroidal anti-inflammatory drugs
PET	: Positron emission tomography
PET	: Positron emission tomography
RAIR	: Recto-Anal Inhibitory Reflex or
SLN	: Sentinal lymph node
TNM	: Tumor, node, and metastasis

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Abstract

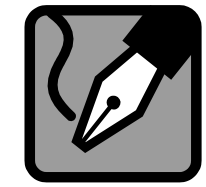
Background: Surgery for rectal cancer in complex and entails many challenges. While the laparoscopic approach in general and specific to colon cancer has been long proven to have short term benefits and to be oncologically safe, it is still a debatable topic for rectal cancer. The attempt to benefit rectal cancer patients with the known advantages of the laparoscopic approach while not compromising their oncologic outcome has led to the conduction of many studies during the past decade. Herein we describe our technique for laparoscopic proctectomy and assess the current literature dealing with short term outcomes, immediate oncologic measures (such as lymph node yield and specimen quality) and long term oncologic outcomes of laparoscopic rectal cancer surgery.

Aim of the Work: The aim of this work is to focus light on recent modalities in surgical management of anorectal carcinoma.

The conventional laparoscopic approach to rectal surgery has several limitations, and therefore many colorectal surgeons have great expectations for the robotic surgical system as an alternative modality in overcoming challenges of laparoscopic surgery and thus enhancing oncologic and functional outcomes. This review explores the possibility of robotic surgery as an alternative approach in laparoscopic surgery for rectal cancer. The da Vinci® Surgical System was developed specifically to compensate for the technical limitations of laparoscopic instruments in rectal surgery. The robotic rectal surgery is associated with comparable or better oncologic and pathologic outcomes, as well as low morbidity and mortality.

Conclusion: Presently, randomized trials to support robotic-assisted surgery for rectal cancer such as the Robotic versus Laparoscopic Resection for Rectal cancer (ROLARR) trial and Comparison of Laparoscopic-Assisted vs. Robot-Assisted surgery for rectal cancer study Group (COLARAR) trial are ongoing to address this issue. We expect that the results from these trials will help establish the robotic approach as the new standard treatment in rectal cancer surgery.

Keywords: Recent, Management, Anorectal carcinoma.



Introduction

Aim of the Work

Anatomy of Rectum & Anal Canal

Pathophysiology of Anorectal Carcinoma

Diagnosis of Anorectal Carcinoma

Treatment of Anorectal Carcinoma

Summary

References