

TITLE PAGE

TITLE: RECENT ADVANCES IN THE MANAGEMENT OF RECTAL CANCER: *No Surgery, Minimal Surgery or Minimally Invasive Surgery*

RUNNING TITLE: Advances in rectal cancer

AUTHORS: Joseph M Plummer, Pierre-Anthony Leake, ²Matthew R Albert

AFFILIATIONS: ¹Department of Surgery, Radiology, Anaesthesia and Intensive Care,
University of the West Indies, Kingston 7, Jamaica

²Center for Colon and Rectal Surgery, Department of Colon and Rectal Surgery,
Florida Hospital, Orlando, FL

AUTHOR CONTRIBUTIONS: All three authors contributed equally to the writing of this manuscript: JM Plummer, P-A Leake and MR Albert.

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CORRESPONDING AUTHOR: JM Plummer; Department of Surgery, Radiology, Anaesthesia and Intensive Care, University of the West Indies, Kingston 7, Jamaica

Contact: Telephone (876) 9271270; Fax (876 9704302)

Email: joseph_plummer@yahoo.com.

Abstract:

Over the last decade, with the acceptance of the need for improvements in the outcome of patients affected with rectal cancer, there has been a significant increase in the literature regarding treatment options available to patients affected by this disease. That treatment related decisions should be made at a high volume multidisciplinary tumor board (MDT), after pre-operative rectal MRI and the importance of total mesorectal excision (TME) are accepted standard of care. More controversial is the emerging role for watchful waiting rather than radical surgery in complete pathologic responders, which may be appropriate in 20% of patients. Patients with early T1 rectal cancers and favorable pathologic features can be cured with local excision only, and Transanal Minimal Invasive Surgery (TAMIS) because of its versatility and almost universal availability of the necessary equipment and skillset in the average laparoscopic surgeon, emerging as the leading option. Recent trials have raised concerns about the oncologic outcomes of the standard ‘top-down’ TME hence transanal TME (TaTME ‘bottom-up’) approach has gained popularity as an alternative. The challenges are many, with a dearth of evidence of the oncologic superiority in the long-term for any given option. However, this review highlights recent advances in the role of chemoradiation only for complete pathologic responders, TAMIS for highly selected early rectal cancer patients and TaTME as options to improve cure rates whilst maintaining quality of life in these patients, while we await the results of further definitive trials being currently conducted.

KEY WORDS: Rectal cancer; watchful waiting; TAMIS; transanal TME

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Core Tip: Over the last decade several additional surgical options have become available in the management of rectal cancer. These extend from non-surgical management with chemoradiation only, local excision for selected cases of early rectal cancer and the standard total mesorectal excision but now

by a transanal approach. Although long-term outcome studies are ongoing, it is the duty of the multidisciplinary treating team treating these patients to be familiar with these options, as they may be of benefit to selected patients with this disease.

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