



Beyond T and N staging on rectal MRI: The future of rectal MRI is here

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It is with great pleasure that we introduce this issue dedicated to the imaging of rectal cancer, authored by experienced and talented members of the recently renamed Colorectal and Anal Cancer Disease Focused Panel (DFP) of the Society of Abdominal Radiology (SAR). The DFP name change, and modification of scope reflects the need to consider colon, and rectal, under one umbrella, as there is some convergence in treatment with growing interest in the pre-operative staging and neoadjuvant therapy of colon cancer in contrast to declining use of neoadjuvant chemoradiation for upper rectal and rectosigmoid tumors, particularly for tumors classified as “good prognosis tumors”.

There are many ongoing changes in the field of colorectal and anal cancer, both in terms of the diagnostic imaging and clinical management. This special issue provides several updates and addresses some of these important changes.

While staging rectal cancer at baseline for the purposes of assessing the need of neoadjuvant therapy has been standard of practice for some time, Dr. Kevin Chang et al. update readers on the interest in the use of CT for the purposes of defining poor prognostic features in colonic tumors that may benefit from upfront chemotherapy. This approach formed the basis of the FOXTROT trial where patients were randomized to neoadjuvant therapy based on CT clinical staging of colonic tumors or to upfront surgery. The preliminary results showed some promise in terms of downstaging but require further validation.

With regards to imaging acquisition and reporting, our authors offer important big picture synopses. Regarding reporting, Dr. Sonia Lee et al. provide important updates to recommended lexicon that we hope provides clarity to those who read rectal MRI. And in terms of image acquisition Dr.

Tyler Fraum et al. give us a comprehensive article on MRI techniques that can help radiologists get the best images possible.

In the realm of anal cancer, we offer two important articles by Dr. Maria El Homsi et al. The first focuses on the role of MRI in post-treatment imaging of anal cancer. The second focuses on rare tumors of the anal canal, which can serve as a reliable resource for radiologists when they encounter those unusual cases.

Lastly, we offer a series of articles that focus on the evolving paradigms and growing complexity in the multidisciplinary treatment of patients with rectal cancer. There are two divergent treatment approaches that appear to be developing in tandem centering around MR based imaging criteria that encompass more than just T and N categories. On one hand there is the increased use of total neoadjuvant therapy (TNT) for rectal tumors with “poor prognostic” MR features and on the other a decline in the use of neoadjuvant chemoradiation for rectal tumors with “good prognostic” features on MRI. The use of TNT for aggressive rectal tumors has resulted in a rise in the clinical complete response rate (cCR) to nearly 50%. This in turn has increased the number of patients eligible for watch and wait (W&W) and organ preservation. On the other end of the spectrum, rectal tumors with “good” prognostic MR features (i.e., clear MRF/CRM, T3 < 5 mm, particularly in the upper rectum) are increasing being treated with upfront surgery. In a review of some of these recent clinical trials, Dr. Viktoriya Paroder et al. summarize the shifting paradigm in the imaging interpretation and treatment approaches that are already being implemented in Europe, Canada, and some centers in the United States.

Dr. Marc J. Gollub et al. update readers on the role of “watch and wait” management of patients with rectal cancer who have undergone neoadjuvant therapy and achieved a complete clinical response. This is an exciting area in rectal cancer and offers hope of improved quality of life to survivors of rectal cancer.

Furthermore, and along those same lines, Dr’s Brian Bednarski and George Chang, renowned colorectal surgeons at the MD Anderson Cancer Center, review the vital role of

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multidisciplinary tumor (MDT) boards in management of rectal cancer patients. Lastly, Dr. Elena Korngold et al. discuss the role of the National Accreditation Program for Rectal Cancer (NAPRC), an initiative by the American College of Surgeons to which aims to standardize treatment of rectal cancer patients via a multidisciplinary approach.

We hope this issue provides some insights into the expanding and changing world of rectal cancer Beyond T

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