Rectal cancer in Kashmir: Early steps in the right direction

In this issue of the journal, Mir *et al*.,[1] present, what is undoubtedly the first and largest series on surgical outcomes for rectal cancer from the (Kashmir) valley. The authors provide an audit of sphincter-saving procedures performed in 117 patients with rectal cancer over a three and half-year period. They go on to describe the pathologies encountered, the perioperative outcomes, and most importantly provide some data on the recurrences and how these were managed. The authors even provide some data on sexual dysfunction encountered in some male patients.

The analysis of surgical outcomes presented by Mir *et al*., follows a recent report from Rasool *et al*.,[2] who noted that colorectal cancer accounted for 7% of 8648 cancer patients studied between 2009 and 2011. Colorectal cancer is the 3rd and 4th most common cancer in women and men, respectively.[2]

Indeed, the 'art (and science)' of rectal cancer surgery has developed tremendously over the last few decades. Central to this development has been the appreciation of anatomical features, namely, the avascular areolar plane between the mesorectum and the pelvic parietal fascia and the pelvic autonomic nerves, the anterior roots of the nerves S2-4, and the superior hypogastric nerves[3] which led to the description of the technique of total mesorectal excision (TME) by Heald and Ryall[4] and the autonomic nerve preservation or the technique colloquially referred to as 'nerve sparing' rectal cancer surgery by Enker *et al*.[3] The technique of TME not only permits a complete resection of the disease by including the draining lymph nodes within the mesorectum within the resected specimen but also a better chance of achieving a negative circumferential resection margin.[5] These in turn have enabled a reduction in local disease recurrence.[6] Autonomic nerve preservation is meant to maintain post-operative genitourinary and sexual function, in short, quality of life. Thus, surrogate markers that need to be addressed for completeness of the TME should, at least, include data on lymph node yield and circumferential resection margin positivity rates, tumor perforation rates, and local recurrence rates.[7] On the other hand, a more precise analysis for urinary and sexual dysfunction would need a systematic pre- and post-surgical administration of at least a few of the following questionnaires, namely European Organization for Research and Treatment of Cancer Quality of Life Questionnaires C30 and CR38, International Consultation on Incontinence Questionnaire, American Urological Association Symptom Index, Brief Sexual Function Inventory for men, and sexual function module of the Cancer Rehabilitation Evaluation System for women.[8] Additionally, the contribution of neoadjuvant chemoradiotherapy would also need to be taken into consideration.

A point of view that appears to be mistakenly held to this day is that the ratio of anterior resections (AR) to abdomino-perineal resections (APR) is a marker of 'surgical' capability. This view is an age old concept that existed prior to the advent of surgical staplers at a time when patients with tumors at or below the peritoneal reflection were offered an APR simply because performing a sutured anastomosis low down in the pelvis was not only technically challenging, but also fraught with the risk of complications. However, all this has changed in modern colorectal surgery. Today, in modern colorectal cancer surgery, especially in specialized colorectal surgical units, the indications for an APR and an ultra low AR are very different. APR is a procedure reserved for very low rectal tumors or tumors involving the anal verge or locally advanced tumors up to 4-5 cm from the anal verge.[7] Thus, APR rates in specialized centers are neither a surrogate marker of technique nor the lack of it, but rather an indicator of the type of pathology being referred to these high-volume specialized centers. Keeping the patient's benefit in terms of oncological clearance as the prime aim of surgery and explaining this to the patient in clear and lucid terms has clearly demonstrated that even if an APR is performed for the right indication, it does not negatively alter the patient's quality of life as compared to an AR.[9] Also to be borne in mind is that the notion that neoadjuvant chemoradiotherapy will downstage a tumor making a patient with a tumor planned for an APR later amenable to an AR is an exception and certainly not the rule.[10]

Conclusion

What are the implications of the study by Mir *et al*.?[1] The study certainly serves as a good, though not perfect, audit of immense importance to patients in Kashmir and the surrounding regions that are now aware that surgeons from Kashmir are just as capable of performing sphincter-saving procedures for rectal cancer. Whereas, the authors may have not employed state of the art methodologies to assess some of the parameters (survival and quality of life), it certainly takes nothing away from the quality of their perioperative outcomes. However, the real value of this manuscript lies in the authors' intent to go beyond the usual publications, which tend to focus on perioperative outcomes and at least make an attempt to look at survival and quality of life. In South Asia manuscripts on survival analysis in gastrointestinal surgery are few and far

between. We thus hope that manuscripts like this will herald a new age of thinking among the gastrointestinal surgical fraternity in the region that we need to cease our fascination with perioperative outcomes and realize that the implications of the surgeries we perform do not end with the patient getting discharged from the hospital but last for much longer!

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