## **Best Practices Checklist for Rectal Cancer**

The following checklist is intended to be complementary to the WHO checklist for patient safety in the immediate pre-operative, peri-operative, and post-operative periods. This checklist can be used to (1) raise awareness of rectal cancer guidelines; (2) enhance pre-operative, intra-operative, and post-operative documentation; and (3) facilitate integration of best practices into pre-operative cancer conferences. **Similarities** to the WHO checklist include evidence-based actions consistent with best outcomes, ease of use, checklist rather than algorithm format (what to donot how to do it). **Differences** include an emphasis specifically on elective rectal cancer surgery and cancer outcomes rather than 30-day safety outcomes.

## PREOPERATIVE EVALUATION CHECKLIST

Yes	No	
	☐ Formal pathology review was performed to identify the presence of invasive carcinoma.	
	☐ In the unobstructed patient, a complete colonic evaluation was performed.	
	☐ The tumor location within the rectum (e.g. distance from anal verge, tumor length, anterior/posterior/left/right) as well as relationship to the levators and anorectal ring was documented.	
	☐ An assessment of family history, preoperative stool continence and sexual function was documented.	
	☐ Clinical staging of the primary tumor (ERUS or MRI) was performed.	
	☐ Clinical staging for distant metastases (Chest/Abdomen/Pelvis) was performed.	
	☐ Preoperative or peri-operative CEA level was measured.	
	☐ Consideration of neoadjuvant treatment for > T2 or node positive disease has been documented. Among those who received neoadjuvant treatment, the tumor was re-staged and location was re-confirmed just prior to operation.	
	☐ A multi-disciplinary discussion of care, preferably during a formal Tumor Board conference, was documented.	
	☐ If a stoma is considered, the site was preoperatively marked.	
INTRA-OPERATIVE CHECKLIST		
Yes	No	
	☐ A thorough exploration and assessment for extra-pelvic disease was performed and is noted.	
	☐ A sharp <b>total or tumor-specific mesorectal dissection</b> with <i>en bloc</i> radical lymphadenectomy was performed.	
	☐ The distal resection margin and its relationship to the tumor was considered prior to rectal transection and should include a distance > 1cm grossly.	
	☐ Involved adjacent organs were resected <i>en bloc</i> .	
	☐ The integrity of the pelvic nerves was assessed.	
	☐ The completeness of resection (including whether the operation was considered curative)	
	was assessed and noted.	
	☐ The rationale for reconstruction of intestinal continuity (sphincter preservation) versus permanent stoma was documented.	

in cases of reconstruction,	
Yes	No
	☐ The type of reconstruction was noted including handsewn versus stapled anastomosis.
	☐ The rationale for a pouch or end-to-side anastomosis vs. straight anastomosis was documented.
	☐ The location of final anastomosis was noted.
	☐ The anastomotic integrity was evaluated (e.g. leak test).
	$\hfill \Box$ A diverting loop ileostomy was considered for cases including pre-operative radiation or intra-operative TME.
POST-OPERATIVE CHECKLIST	
Yes	No
	☐ For patients in whom a stoma was necessary as a part of their surgical treatment, the postoperative care included stoma care teaching.
	☐ For patients with Stage II or Stage III cancer, a post-operative consultation with a medical oncologist was recommended.
	☐ Radial and distal margins were documented on the pathology report.