A retrospective review of prospectively collected data

**METHODS:**

There has been no published study that has evaluated the impact of NAPRC accreditation of a rectal cancer program in improving the outcomes of rectal cancer care in the United States. Cancer (NAPRC) was necessitated because there was a great variation and need for double gloving.

**CONCLUSION:**

This study used a modified Delphi process to develop a tailored set of consensus recommendations on technical practices that are recommended during colorectal surgery for the prevention of SSI. Although the Delphi consensus was aligned with other guidance for several topics, this Delphi produced new, more granular, and expanded recommendations specific to colorectal surgery.

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**Does Adherence to National Accreditation Program for Rectal Cancer (NAPRC) Process Measures Lead to Better Outcomes in the Management of Rectal Cancer? Initial Experience From the First NAPRC Accredited Center in the Country**

Piyush Aggarwal, MD, FACS, Christine Hong, PA-C, Shell Porter, RN, BSN, Samuel C Oonmen, MD, FACS

**John Muir Health, Walnut Creek, CA**

**INTRODUCTION:**

The National Accreditation Program for Rectal Cancer (NAPRC) was necessitated because there was a great variability in the outcomes of rectal cancer care in the United States. There has been no published study that has evaluated the impact of NAPRC accreditation of a rectal cancer program in improving the outcomes.

**METHODS:**

A retrospective review of prospectively collected data in cancer registry and NAPRC database maintained at our hospital was done. Patients who underwent surgery for stage I-III rectal cancers between 2012 and 2019 were identified. They were divided into pre-NAPRC (2012-2016) and post-NAPRC (2017-2019) cohorts. These were then compared based on their demographics, baseline tumor characteristics, process measures in NAPRC accredited programs and short-term outcomes.

**RESULTS:**

Both cohorts were similar in their age, sex, ASA class, clinical staging, type of surgery (APR vs LAR), and mode of surgery (Open, Laparoscopic or Robotic). More patients in post-NAPRC group had complete pre-treatment staging work-up (CT and MRI), multi-disciplinary tumor board presentations, pre-op CEA levels and initiation of treatment within 60 days of diagnosis. However, there was no statistical difference in Circumferential resection margin positivity rates (9.2% vs 6.3%, p=0.54), mean number of Lymph nodes obtained (21.02 vs 22.7, p=0.36), Complete Mesorectal excision rates (78.7% vs 79.2%, p=0.997), 30 day mortality (2.8% vs 0%, p=0.246) and 90 day mortality (3.7% vs 0%, p=0.179) rates between the two groups.

**CONCLUSION:**

Adherence to NAPRC process measures did not result in better short-term outcomes at our institution.

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**Gracilis Muscle Interposition: A Valuable Tool for the Treatment of Failed Rectovaginal Fistula Repair Due to Obstetric Injury: Single Center Experience**

Victor Straisman, MD, Emanuela Silva-Alvarenga, MD, Giovanna M da Silva, MD, FACS, Steven D Wexner, MD, PhD, (Hon), FACS, FRCS (Eng, Ed), Hon FRCS (I, Gl)

Cleveland Clinic Florida, Weston, FL

**INTRODUCTION:**

Rectovaginal fistulas (RVFs) account for approximately 40% of anorectal complications from obstetrical trauma. Treatment can be challenging requiring multiple surgical repairs. Interposition of healthy transposed tissue (lotus or Martius...
flap or gracilis muscle) have been used for recurrent RVF. We aimed to review our experience with gracilis muscle interposition (GMI) for RVF due to obstetric injury.

**METHODS:** A retrospective analysis of patients who underwent GMI for RVF after obstetric injury from February 1995 to December 2019 was undertaken. Patient demographics, number and prior treatments, comorbidities, tobacco use, postoperative complications, additional procedures, and outcome were assessed. Success was defined as absence of leakage from the repair site after stoma reversal.

**RESULTS:** Six of 119 patients who underwent GMI did so for recurrent RVF attributable to obstetric injury. Median age was 34.2 (28-48) years. All patients had at least one previously failed procedure [median: 3 (1-7)] including endorectal advancement flap, fistulotomy, vaginoplasty, mesh interposition, and sphincteroplasty. All patients underwent fecal diversion prior to or at initial procedure. Success was achieved in 4/6 (66.7%) patients; 2 underwent further procedures (one fistulotomy and one rectal flap advancement) for a final 100% success rate as all ileostomies were reversed. Morbidity was reported in 3 (50%) patients, including wound dehiscence, delayed rectoperineal fistula, and granuloma formation in one each, all managed without surgery. There was no morbidity related to stoma closure.

**CONCLUSION:** GMI is a valuable tool for recurrent RVF after obstetrical trauma. Our ultimate success rate was 100% with a relatively low morbidity rate.

**Hospital Cost Associated with Preventing and Managing Iatrogenic Ureteral Injury in Inpatient Elective Colectomy**

Ana Filipa Alexandre, PharmD, MSc, Tomomi Kimura, MD, PhD, Qi Feng, PhD, Wei Han, PhD, Jason Schwartz, MD

Astellas Pharma Europe B.V., Leiden, Netherlands, Astellas Pharma, Inc, Northbrook, IL

**INTRODUCTION:** There have been debates about whether preoperative ureteral catheterization/stenting (PUC) could identify and prevent IUI in abdominopelvic surgeries. There is also limited information on whether PUC can save hospital costs.

**METHODS:** Inpatient elective colectomies (Oct 2015-Dec 2019) were retrospectively identified in the Premier database and followed for up to 120 days. Surgeries with PUC were propensity-score (PS) matched to surgeries without PUC to compare UUI incidence and to estimate additional PUC costs for hospital. IUI costs for hospital were estimated as the median difference between PS-matched IUI and no-IUI pairs. The economic impact to hospitals for PUC was estimated by adding PUC and IUI costs, considering the difference in IUI rates with and without PUC.

**RESULTS:** PUC was used in 6.75% (95% CI: 6.62-6.88) of 144,865 inpatient elective colectomies. The overall IUI rate was 1.50% (95% CI: 1.44-1.57) and around 60.0% were identified intraoperatively. After matching, the incidence of IUI was 1.44% lower with PUC than without PUC; the number needed to treat was 69 surgeries to prevent one IUI with PUC. The additional cost for PUC was $2,053 ($1,805-$2,289). Total postoperative IUI cost was almost three-times more than intraoperative IUI cost for the hospital. Considering IUI cost offsets, the economic impact to hospitals was $2,026 per surgery with PUC.

**CONCLUSION:** In this dataset, although PUC decreased overall IUI risk during inpatient elective colectomy, PUC use did not lower hospital costs.

**Impact of Enhanced Recovery Program on Clinical Outcomes after Elective Colorectal Surgery in a Rural Hospital**

Antonio Pesce, MD, PhD, Mattia Portinari, MD, Nicolò Fabbris, MD, Valeria Sciascia, MD, Lisa Uccellatori, Ms, Leonardo Sattin, MD, Erminio Righini, MD, Carlo Feo, MD, FACS

Unit of General Surgery, Department of Surgery, Azienda Unità Sanitaria Locale di Ferrara, University of Ferrara, Ferrara, Italy

Unit of Anesthesia and Intensive Care, Department of Emergency, Azienda Unità Sanitaria Locale di Ferrara, Ferrara, Italy

**INTRODUCTION:** The main purpose was to determine the impact on postoperative outcome of a standardized enhanced recovery program (ERP) for elective colorectal surgery in a rural hospital.

**METHODS:** A prospective series of patients (N=80) undergoing elective colorectal resection completing a standardized ERP protocol in 2018-2020 (ERP group) was compared to patients (N=80) operated at the same rural hospital in 2013-2015 (pre-ERP group). The exclusion criteria were: ASA IV, TNM stage IV, inflammatory bowel disease, emergency surgery, and rectal cancer. The primary outcome was hospital length of stay (LoS) which was used as an estimate of functional recovery. Secondary outcomes included: postoperative complications, 30-day readmission, mortality, and factors predicting prolonged hospital stay.

**RESULTS:** Age, gender and body mass index were comparable in both groups. Laparoscopic approach was performed in 95% of patients in the ERP group vs 0% in pre-ERP group. The median adherence to ERP protocol elements was 68%. The median hospital LoS in ERP-group was 5 days (IQR, 4-7 days) vs 10 days (IQR, 9-14 days) in the pre-ERP group (p<0.0001). A 31% reduction of postoperative complications was observed in the ERP group with no significant difference in 30-day mortality and re-admission rates. After adjusting for potential confounders, following a conventional peri-operative protocol was the only independent factor predicting a prolonged hospital LoS (p<0.0001).

**CONCLUSION:** Although limited hospital resources are perceived as a barrier to ERP implementation, the current experience demonstrates how adopting an ERP program in a rural area is feasible and effective, despite it requires greater effort.