Empowering a Decision Support Tool to Assist Older Patients Considering Surgery for Rectal Cancer

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Background
- Surgery is the mainstay for treatment of rectal cancer.
- Older patients may consider age a detriment when considering surgery.
- Frailty is considered a risk factor for adverse surgical outcomes.

Methods
Patients with primary rectal cancer who had surgery
American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP) data base (2012-2015) using ICD9/10 codes
Age categories: 16-64, 65-79, 80-89 years
Simplified Five-Item Frailty Index (sFI) used to form groups into 0, 1, 2 and 3 or more frailty characteristics

Frailty Characteristics
- History of diabetes mellitus
- Functional status
- History of congestive heart failure
- Hypertension requiring treatment

ACS NSQIP definitions for postoperative morbidity/complications (at least one)
- Infection
- Acute renal failure
- Pneumonia
- Unplanned intubation
- Pulmonary embolism
- Ventilator requirement > 48 hours
- Renal insufficiency

Frailty Index
- sFI = 0 is least frail
- sFI = 3 is most frail

Question
Should frailty be discussed with a patient, regardless of age, when considering outcomes for patients with rectal cancer?

Results
- 9,289 patients in analysis
- Covariate-adjusted logistic regression modeling showed:
  - Oldest age not independently associated with morbidity when adjusting for frailty
  - Persons most frail (sFI ≥ 3) had highest morbidity
  - Both older age and frailty independently associated with higher mortality (sFI ≥ 3)
  - Frailty more strongly associated with mortality

Frailty and Age in Patients with Rectal Cancer

Conclusions
- Frailty is more strongly associated with both morbidity and mortality than older age in patients undergoing proctectomy.
- Surgical options can be presented to older patients with the use of sFI as a decision-making tool.
- Advanced practice nurses can use decision-making tools to help their patients understand risks and benefits of surgery for rectal cancer.

References