Frailty Has Different Effects on the Outcomes for Patients

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Disclosures

None

CAROTID STENOSIS: THE IMPACT OF FRAILTY SYNDROME ON PATIENT OUTCOMES

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Frailty

- Frailty has been shown to increase morbidity, mortality in patients undergoing variety of surgical procedures
- Estimated 40 - 60% of patients who undergo vascular surgery are frail
- Carotid revascularization are generally considered safe with minimal mortality and morbidities and carotid stenting (CAS) is often reserved for poor surgical candidates

Methods

- NSQIP 2005 – 2012
- All elective CEA and CAS, by CPT code
- Primary endpoints: in-hospital mortality, in-hospital complications
  - surgical site infections, urinary tract infection (UTI), pneumonia, DVT, pulmonary embolism, cardiac, renal and neurological complications.
- Secondary endpoints: failure to rescue, length of stay, and readmission within 30 days

Frailty

- Frailty is shown to affect the outcome of CEA
- Effects of frailty on CAS has not been examined

GOAL

Assess the impact of frailty on clinical outcomes of carotid interventions, particularly on CAS
Methods

Frailty is assessed using Modified Frailty Index (mFI)  
11 NSQIP categories  
mFI ≥ 0.27

Patient Demographics: Frail vs. Non-frail

Outcomes: Frail vs. Non-frail

Frailty and Outcome

Discussion

Previous study showed frailty increased stroke, MI, and mortality in CEA population  
The Association was not observed in CAS cohort  
Effect of regional / general anesthesia  
Incidence of peri-procedural stroke
Summary

- Frailty is a significant predictor of adverse outcomes (complications, mortality, FTR, 30-d readmission) in patients undergoing carotid interventions.
- The association between frailty and carotid stenting was not observed.
- Further studies are needed to clarify why this effect is seen.