Frailty in Older Surgery Patients May Be Under Recognized
Simple Screening Could Predict a Patient’s Risk for Complications

CHICAGO (October 6, 2016) — Identifying frailty in older patients could increase their chances of surviving surgery, as well as improve their overall outcomes, according to a new study posted online today in *The Annals of Thoracic Surgery*.

“Patients with frail health have less ability to overcome stressors such as illness, falls, and injury, and have a higher risk of adverse effects from medications, procedures, and surgery,” said Angela K. Beckert, MD, of the Medical College of Wisconsin in Milwaukee. “If a patient is more robust, with better physical performance and vigor—in other words, less frail—then I believe surgical outcomes would be better.”

Dr. Beckert, Mark K. Ferguson, MD, and other colleagues from The University of Chicago Medicine, conducted a study to determine the proportion of pre-frail and frail patients who might benefit from frailty reduction intervention. The group examined 125 patients (average age of 70) at The University of Chicago Thoracic Surgery Clinic who were considered candidates for major thoracic surgery, such as lung resection, esophagectomy, or chest wall resection. The majority of patients (68.8%) who participated in the frailty screening were determined to be either pre-frail or frail, suggesting that frailty may be seriously under recognized within the surgery population.

Frailty in surgery patients is consistently associated with a greater risk of surgical complications, increased length of hospital stay, and discharge to a rehabilitation facility rather than home. In addition, frail patients are at a higher risk for readmission, suffer from lower quality of life following surgery, and end up paying higher overall costs for their care.

**Frailty Is Easily Identified**

The researchers conducted frailty screening using five established characteristics: unintentional weight loss, weakness (grip strength), exhaustion, low activity level, and slow gait. The most commonly identified characteristic in this study was exhaustion; the least common was slowness.
“This study indicated that a large number of patients who are candidates for major surgery have important risk factors related to frailty,” said Dr. Ferguson. “Knowing what these factors are can help physicians, patients, and the patients’ families better understand the risks and may motivate them to participate in activities that reduce their risks.”

One of the most important benefits of identifying frailty, explained Dr. Ferguson, is the ability to offer patients activities, such as nutritional and exercise interventions that can modify their frailty status prior to surgery and reduce their surgical risks. This study was just the first step. The research group is currently conducting studies of exercise intervention for frailty and the relationship between frailty and resiliency (the ability to bounce back from complications after surgery).

Frailty screening may also affect the recommendation a doctor makes regarding treatments and surgical options. According to Dr. Beckert, if a patient is determined to be frail, a surgeon may consider a different or less extensive approach to the operation. Also, during the early postoperative period, the health care team may provide more intensive and closely supervised care, including physical, nutritional, and occupational therapy.

“Frailty screening helps doctors better prepare patients for what to expect,” said Dr. Beckert. “The screening results provide more accurate information to use in the complex decisions the patient, family, and health care team make about treatment options.”

With the rapid growth of the elderly population and improved life expectancy (now 78 years), a rising number of older adults are expected to undergo surgery, with a greater chance of experiencing complications after surgery. The US Census Bureau reports that the elderly population in the United States is projected to almost double, from the most current estimate of 43 million in 2012 to 80 million by the year 2050. In addition, the National Hospital Discharge Survey reported that more than one-third of all surgical procedures are performed on patients over the age of 65, with that number likely to increase over the next few decades.

As a result, experts anticipate that frailty screening—which can be completed within a clinic appointment—will become even more crucial when considering the care of older patients facing surgery.

“There is an increasing awareness of the frailty problem among surgeons,” said Dr. Ferguson. “We anticipate that screening efforts will expand substantially in the near future.”

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Note: No authors reported disclosures.
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