Irish Medical Journal
Established 1867

Issue: Ir Med J; Vol 113; No. 6; P106

Frailty Index: A Useful Stratification for Elderly Surgical Patients

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Dear Sir,

Frailty is generally considered to be a state characterised by reduced physiological reserve and loss of resistance to stressors caused by accumulated age-related deficits.[1] All too often elderly patients undergo surgical procedures, have complicated post operative courses, prolonged hospital stays and fail to return to their pre-operative functional and cognitive state. Many of these procedures relate to cancer due to the feared natural history of the disease resulting in worsening symptoms, deteriorating quality of life and the end result of death. It is a very challenging consultation when faced with, for example, an 80 year old man with muscle invasive bladder cancer (MIBC) and his family. On the one hand- the 5 year overall survival of untreated MIBC is 5%.[2] On the other hand, an 80 year old 'frail' man has a 1 year mortality rate of 41% following radical cystectomy.[3] To many families, that translates to do nothing and 95% die- do something and 60% live.

The challenge for the surgical team is to appropriately risk stratify a patient- outline their individual risk based upon their age, comorbidities and disease stage. No doubt this is done every day in clinics around the country but many still rely on the 'eyeball' test or 'end of bed' test. The frailty index is a unique risk variable even after adjustment for age and comorbidities.[4] It encompasses deficits including comorbidities, signs, symptoms, laboratory abnormalities, cognitive impairments, and disabilities in activities of daily living. Most patients undergo a pre-assessment prior to elective surgery- patients are assessed and risk stratified for peri-operative issues based upon the ASA, morbidity score and operation. The frailty index goes beyond this and assesses their baseline functional and cognitive status and stratifies their chance of return to 'normal' function.

Furthermore, frail patients have higher rates of complications, ICU admissions, discharge issues and longer length of stays. As a result the total cost of their procedure is significantly higher compared to non-frail patients.[4] Given the well documented issues with the current state of our health service, any factors that could potentially improve length of stays and in hospital costs are valuable. Multimodal prehabilitation programs, including exercise, nutrition and psychological interventions, could potentially improve the perioperative outcomes of these patients by improving their frailty index. Although not all patients can be deferred for a few weeks of prehabilitation, many oncological patients are still waiting weeks to months due to the current waitlist times in our health service, and this failure of the system could be used to everyone's advantage.

The frailty index allows an objective assessment of the patient's functional status and further risk stratifies them. It can help to make a more informed decision regarding the best course of action for the patient. It may also provide a more accurate assessment for the patient, their family and the clinician potential discharge issues in advance, and result in more realistic expectations for the future.

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