Frailty and the Management of Patients with Acute Cardiovascular Disease

Definition and Epidemiology of Frailty

- The Fried scale is the most widely researched. It requires three or more of the following five components for the diagnosis of physical frailty: 1) exhaustion, 2) unintentional weight loss, 3) low physical activity, 4) impaired grip strength, 5) slowness

- Phenotype models rely upon functional measures of physical performance such as gait speed (typically over five to ten meters) and grip strength (measured with a dynamometer). One commonly reported assessment included in other phenotype models is the “timed get up and go test”

- Frailty appears to be more prevalent in women and in people of lower educational status and income. Geographic variation also exists, with a higher prevalence in Southern than Northern Europe, and in African Americans

Frailty and Acute Coronary Syndrome (ACS)

- ACS is a common disease, and the presence of frailty is an independent risk factor for mortality

- In acute phase of STEMI, timely reperfusion by primary PCI is generally recommended as randomized trials showed that the benefit of primary PCI over fibrinolysis was independent of age and there are no data on frailty specifically

- Although there are no data about the best management of the frail patient with non-STEMI, consideration of an invasive strategy is still recommended. In spite of this, invasive management is currently underused in the frail and among co-morbid patients

Frailty and Heart Failure

- Frailty is present in 50 to 70% of older people hospitalised with acute heart failure (AHF)

- The optimal tool and time to diagnose frailty in AHF patients has not yet been established. Frailty should be considered at the time of stratifying AHF older patients in the Emergency Department setting as well as in those undergoing invasive procedures such as TAVI, cardiac surgery, cardiac resynchronization therapy and post-PCI

- There is a paucity of evidence about optimal medical care of the frail older patient with AHF, but in general the “cose objective” need not be that demonstrated to be effective in clinical guidelines, but the one that keeps the patient active and free of restricting symptoms such as dyspnoea or dizziness

Frailty and Critical Care

- With an aging population, patients aged over 80 years comprise 10 to 20% of critical care admissions, and this is increasing by 6% annually across the world

- The role of frailty in the critically ill is complex, and further confounded by the finding that critical illness may not only accelerate a patient’s pre-morbid frail state, but also lead to the development of many of the characteristics of frailty

- Mortality in critically ill older people requiring intensive care remains high, in particular those with medical or emergency admissions, with an intensive care mortality of 38 to 64%, in-hospital mortality of 45 to 55%, and one year mortality of 80 to 89%

Frailty and Atrial Fibrillation (AF) with other Arrhythmias

- Frailty is common in older people with AF. The relative benefit from the use of oral anticoagulants (OAC) for reducing stroke and mortality in the older person with AF is similar to that seen in younger subjects. Falls are often cited as a reason to stop OACs, but they are not an independent predictor of bleeding on OAC

- New oral anticoagulants retain their treatment effect in older age cohorts

- Realistic expectations regarding the prognosis have to be weighed against quality of life for the frail patient in decision making. Decisions regarding rate or rhythm control and the prescription of OAC should be patient-centred and symptom-directed, with careful consideration needed to overall clinical status, comorbidities and frailty/morbid patients

Conclusion

- Frailty may be more important for clinical outcomes than conventional (“medical”) measures of cardiovascular risk

- The best outcome is what is best for the individual person being treated, and doing less may be better in some cases. To recognize frailty and the impact it may have on the individual patient alongside the benefit of any intervention is to start to understand the person independently of clinical labels