LETTER TO THE EDITOR

SETTING GOALS OR SHIFTING GOALPOSTS: ROLE OF FRAILTY FOR CRITICAL CARE DECISIONS DURING COVID-19

Dear Editor,

Frailty is characterized by a loss of physiological reserves leading to increased susceptibility to adverse outcomes with stressor events (1). With healthcare resources worldwide overstretched by the unprecedented COVID-19 pandemic, there is intense interest in reliable assessment tools to inform patient prioritization for scarce intensive care resource. Not surprisingly, frailty tools have been thrust into the spotlight as the panacea to age-based criteria for critical care triage decisions. However, detractors worry that rigid and indiscriminate application of frailty tools may ironically exacerbate the deprioritising of older adults and other vulnerable populations. Herein, we describe the 3F approach to guide thinking about the role of frailty in critical care decisions for older adults during the COVID-19 pandemic.

Framing

Setting goals of care versus shifting goalposts of care

Frailty captures the health status of an older person and predicts adverse outcomes in the community and acute inpatient care settings. Over the years, geriatricians have promoted frailty as part of a patient-centred approach to assessment that is the cornerstone for rational context-appropriate goals of care (2). On this basis, there is keen interest in the development and broad uptake of convenient screening and assessment tools to assist in frailty identification amongst older people who access the healthcare system (1). Its utility in predicting adverse outcomes have also been examined in the intensive care unit (ICU) setting. Whilst the multidimensional measure of frailty such as Clinical Frailty Scale (CFS) and Frailty Index (FI) generally predict higher hospital mortality, longer length of stay, poor functional outcome and institutionalisation, these findings are not uniform across all studies (3). Notably, there are no outcome studies that examine the effectiveness of frailty for ICU triaging purposes. Using frailty for such a purpose would be akin to shifting goalposts of care with current knowledge.

Framework

Right instrument for the right purpose

While frailty has value in allocation of scarce health resources, it also has limitations. Frailty does not invariably lead to adverse outcomes in older adults. In fact, a recent study demonstrated that the outcomes for frail patients more than 80 years of age can be good, with 91% surviving ICU admission, 82% surviving to hospital discharge, and fewer than 5% discharged to new nursing home care (4). Within the spectrum of frailty, the mildly frail have better outcomes than the moderately or severely frail, even in the oldest-old, and should not be excluded from ICU care. Moreover, as frailty has never been validated for ICU triaging in COVID-19 or related purposes, there is a need to establish strict criterion and construct validity for critically ill patients and generalisability of a score derived from non-critically ill patients in the chronic disease setting towards the critically ill (5). As healthcare systems become less overwhelmed with flattening of the epidemic curve, this affords an ideal window of opportunity to conduct validation studies of composite predictive models which incorporate frailty along with consistent predictors of poor outcomes in older adults admitted to the ICU such as age, comorbidities, disability and severity of illness (5).

Forward conversations

Achieving consensus on goals of care

Amalgamating information from frailty assessments with patients’ antecedent wishes will enable physicians to recommend goal-concordant care. This highlights the importance of early Advanced Care Planning (ACP) discussions to understand patient’s preferences and therapeutic goals. Pre-COVID, these dialogues have been fairly opportunistic, as well as confined to patients with advanced illnesses or the acutely ill. Knowing that the current pandemic will be protracted, efforts should be streamlined towards engaging frail patients upstream while they are well. These forward conversations are especially salient for severely frail patients (including persons with advanced dementia) who are not likely to benefit from ICU care. Leaving decisions till crisis occurs would mean patients may lose their opportunity of exercising their autonomy to delirium, as well as risking impulsive decisions from distressed surrogates under time and situational pressure.

Conclusion

Hubbard et al. recommend that frailty screening tools should not be used in isolation but instead, are implemented as part of a person-centred approach to assessment in older adults that takes account of three key biomedical factors: severity of the presenting acute illness, the likelihood of medical interventions being successful and the degree of frailty (6). Our 3F approach presents a conceptual framework in a clinically sound and ethical manner that considers the strength and limitations of frailty assessment in determining its role in critical care decisions for older adults during the COVID-19 pandemic. Indeed, until we can meaningfully determine the exact contribution of frailty to adverse outcomes in critically ill older adults, frailty is better used as part of a multi-pronged
assessment to assist prognostication and to guide meaningful conversations on goals of care i.e. to set goals of care rather than shift the goalpost of care.

Conflict of interest statement: We have no potential conflict of interest.

R. Hsien-Xiong Lee¹,⁴, E. Peiying Ho²,³, H.-Y. Neo¹,³, A. Hum¹,³, W.-S. Lim²,³

1. Department of Palliative Medicine, Tan Tock Seng Hospital, Singapore; 2. Institute of Geriatrics and Active Ageing, Tan Tock Seng Hospital, Singapore; 3. Department of Geriatric Medicine, Tan Tock Seng Hospital, Singapore; 4. Department of Geriatric Medicine, Woodlands Health Campus, Singapore

Corresponding Author: Lee Hsien Xiong Raphael, Department of Geriatric Medicine, Woodlands Health Campus, Singapore, Tan Tock Seng Hospital, Annex 2 Level 3, 11 Jalan Tan Tock Seng, Novena, Singapore 308433, Office: (65) 63596477, Email: raphael_lee@whc.sg

References

1. Dent E, Lien C, Lim WS, et al. The Asia-Pacific Clinical Practice Guidelines for the Management of Frailty [published correction appears in J Am Med Dir Assoc. 2018 Jan;19(1):94]. J Am Med Dir Assoc. 2017;18(7):564–575.
2. Lim WS, Wong CH, Ding YY, Rockwood K, Lien C. Translating the Science of Frailty in Singapore: Results from the National Frailty Consensus Discussion. Ann Acad Singapore 2019;48(1):25-31.
3. Muscedere J, Waters B, Varambally A, et al. The impact of frailty on intensive care unit outcomes: a systematic review and meta-analysis. Intensive Care Med. 2017;43(8):1105-1122.
4. Darvall JN, Bellomo R, Paul E, et al. Frailty in very old critically ill patients in Australia and New Zealand: a population-based cohort study. Med J Aust. 2019;211(7):318-328.
5. Ranzani OT, Besen BAMP, Herridge MS. Focus on the frail and elderly: who should have a trial of ICU treatment?. Intensive Care Med (2020).
6. Hubbard RE, Maier AB, Hilmer SN, Naganathan V, Etherton-Beer C, Rockwood K. Frailty in the Face of COVID-19. Age Ageing. Published 6 May 2020.