EDITORIAL

Now that we have a definition for physical frailty, what shape should frailty medicine take?

Concepts of frailty sit at the heart of much current discourse about how we deliver and develop services for vulnerable older people. Yet the word frail is used variably and imprecisely. Some of this might be attributable to the differences between lay and technical definitions, but there has also been a failure within the scientific literature to agree a core specification of ‘what is frail’. Two main theoretical constructs have come to dominate the conversation. Fried et al’s phenotypic model defined a constellation of five possible components (weight loss, exhaustion, weakness, slowness and reduced physical activity), which indicate an underlying physiological state of multisystem dysregulation [1]. Rockwood and Mitnitski, meanwhile, described an accumulation of deficits model, which counted the number of impairments and conditions in an individual patient to create a Frailty Index [2]. These models demonstrate a degree of overlap and statistical convergence in terms of their ability to predict adverse outcomes but they, nevertheless, identify different patient cohorts as frail [3]. This has led to tension about which ought to be operationalised in clinical practice.

The recent publication of a consensus document, with Prof. Fried and Prof. Rockwood as co-authors, offers the tantalising prospect that the frailty narrative has started to crystallise in a way that might be clinically useful [4]. The paper focusses on the concept of physical frailty and agrees its definition as, ‘A medical syndrome with multiple causes and contributors that is characterized by diminished strength, endurance, and reduced physiologic function that increases an individual’s vulnerability for developing increased dependence and/or death’. This builds upon previous agreement that frailty is discrete from disease and disability and that it may be reversible [5]. Importantly, consensus was achieved that the specific model of frailty applied in a clinical setting was less important than the fact that one or another well-validated principle is used by an appropriately skilled clinician.

The consensus group went on to suggest that all over 70s be screened for frailty, with the focus being those frail patients without evidence of disability who, based upon the available evidence, would be most likely to benefit from clinical interventions. This seems somewhat premature. Frailty measures are sensitive, which would make them reasonable screening tools. There is, however, underwhelming evidence regarding the ability to intervene early to reverse frailty. Of the four interventions highlighted by the group as having ‘some evidence’—exercise (resistance and aerobic), caloric and protein support, vitamin D, and reduction of polypharmacy—only exercise was identified as having a strong evidence-base in a recent structured literature review [4]. More research is required.

There is immediate work to be done in moving frailty medicine forward, but it is in those patients with more advanced frailty where efforts ought to be focused. The most evidence-based intervention for frailty is comprehensive geriatric assessment (CGA), defined as a ‘multidimensional interdisciplinary diagnostic process focused on determining a frail older person’s medical, psychological and functional capability in order to develop a coordinated and integrated plan for treatment and long term follow up’ [6]. The evidence-base, though, is largely derived from patients with geriatric syndromes, or emergent or established disability [7]—a more advanced state of frailty than that which the consensus report recommends screening for.

Getting CGA to the right patients, at the right time, should be the priority. A significant proportion of patients who might benefit from CGA do not currently receive it [8, 9]. An increasing array of opportunities to commence the process have been identified, including when frail older patients attend acute receiving units [8], are admitted to care homes [10] or are admitted for elective surgery [11], but we are a long way from an integrated model of care that allows case management and iteration across primary, secondary, health and social care boundaries in such a way that CGA can operate as a single continuous process for all frail patients.

A whole-system approach of this type requires a broad understanding of how CGA works. CGA requires multi-disciplinarity defined not just by involvement of multiple disciplines, but also by communication between them. It requires co-ordination and iteration, where one responsible professional maintains oversight of the patient’s problems and management strategies for these. The medical component requires collation of all cumulative deficits, including the extent of polypharmacy, before making medical decisions. It requires expertise in the management of the deficits most commonly seen in older patients—falls and syncope, cognitive impairment, incontinence and immobility—and how these interact. Because frailty is a marker of increased mortality, it will inevitably involve skills in end-of-life care.

Who should deliver this model of frailty medicine is not certain. Geriatricians have much of the pre-requisite expertise, but it is unlikely they can ever exist in sufficient numbers to be present wherever CGA needs to be. If a whole system
approach is to be adopted, general practitioners and acute hospital specialists will need to understand the process, and have sufficient skills, to conduct some aspects of frailty medicine, at least some of the time. In many instances, they do not currently have the skills to do so [8, 10]. Similar approaches are required to improve understanding of frailty by all nurses and allied healthcare professionals.

In determining the future shape of frailty medicine, the profession faces a number of challenges. If we are to push the boundaries by screening for frailty in an attempt to halt or slow its progress, we first need a concerted effort to build the research evidence underpinning frailty interventions. Meanwhile, if we are to manage those patients who have already progressed to more advanced frailty states, we must build CGA into our systems and models of working. If we are to do that then all doctors, particularly general practitioners and acute hospital specialists, will have to build the skills that will make them competent frailty practitioners. Frailty must move from dominating our discourse about vulnerable people, to determining our response.

Key points

- The accepted international consensus definition of physical frailty is ‘A medical syndrome with multiple causes and contributors that is characterized by diminished strength, endurance, and reduced physiologic function that increases an individual’s vulnerability for developing increased dependency and/or death’.
- Inadequate evidence about the impact of early intervention for physical frailty mean that mass screening cannot yet be advocated.
- CGA is an effective intervention for more advanced frailty states.
- Current health services need to be adapted to provide the structure and resources for comprehensive geriatric assessment wherever older people with more advanced states of frailty require care.

References