PERSPECTIVES FOR RESEARCH AND CLINICAL PRACTICE ON FRAILTY

Perspectivas para a pesquisa e prática clínica em fragilidade

The significant increase in scientific research on frailty has led to important advances in understanding pathophysiological mechanisms and their impact on human aging. Associated with a variety of conceptual frameworks, diagnostic tools for detecting frailty have rapidly multiplied, many investigating risk prior to medical or surgical interventions, others considering long-term complex care planning.[1]

Despite these advances, frailty assessment is still quite incipient in geriatric clinical practice and even more insufficient in primary health care.[2] In this issue of *Geriatrics, Gerontology and Aging* (*GGA*), readers will find an interesting exploratory analysis of the association between frailty, anthropometric variables and functional capacity in older adults living in the community and in nursing homes.[3]

Although certain barriers might explain our low national rate of routine fragility assessment,[1,4] this problem has not yet been sufficiently investigated. Moreover, major international regulatory agencies (the US Food and Drug Administration and the European Medicines Agency) do not yet recognize frailty as an outcome or indication for pharmacological or non-pharmacological interventions, which means that frailty is not eligible for reimbursement by health systems, and some regulatory bodies are still reluctant to approve clinical trials that consider frailty as a result.[5]

The discovery of experimental animal models of frailty has renewed hopes that the syndrome may be recognized as an outcome measure in preclinical studies. Interleukin (IL)-10 knockout mice and Cu/Zn superoxide dismutase enzyme (Sod1KO) have recently been added to rat and mouse fragility models that mimic the two most frequently used diagnostic criteria (fragility phenotype and fragility index).[6] Biomarker studies are still restricted to cross-sectional analyses and observational series; more robust and better delineated longitudinal investigations are needed to confirm their use as fragility markers. Promising biomarkers include fibrinogen, albumin, dimer D, leukocyte count, IL-6, c-reactive protein (CRP), and tumor necrosis factor alpha (TNF-α).[7]

If we are to arrive at a solid understanding of which intervention strategies can be effective and viable for managing and preventing frailty, it is crucial for study design to progress, transitioning from observational studies (which basically analyze the association between variables) to longitudinal and experimental studies on the action of interventions and the effects of exposure.[3] This issue features a relevant example of this type of study: a longitudinal analysis of predictors of functional dependence in people aged 50 years and older.[8]

It is also important to perceive frailty as a dynamic state that is potentially reversible and responsive to preventive interventions. Comprehensive care strategies should include variation in the frailty continuum, focusing particularly on maintaining functional capacity through person-centered care.[4,9] This issue of *GGA* includes an interesting review article on the potential of respiratory muscle training in sarcopenia management.[10]

Identifying frailty in older adults without proposing or discussing the advantages of proven interventions seems, in a crude analogy, as stigmatizing as disregarding a surgical intervention based solely on an individual's biological age. Incidentally, the use of stigmatizing language in academic discourse has been widely debated and reviewed, such that international journals and scientific events are rejecting studies whose language is considered pejorative, as discussed in an opinion article in this issue of *GGA*.[11]

In conclusion, we invite readers to share *GGA* with their peers and institutions and consider publishing in it. The editorial board has been collaborating with the Brazilian Society of Geriatrics and Gerontology so that the journal can soon appear in new indexes and find a growing audience for its content.

Good reading!

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