

Frailty Syndrome

Efstathios Koutsostathis^{1,2*}, Almeida Gaxhia² and Alexandros Drimonitis²¹Sotiria Hospital Athens.²Higher School of Professional Training Nea Ionia Attica***Corresponding author**Efstathios Koutsostathis,,
Kerameikos Health Center,
Greece.

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Citation: Efstathios K. et.al., (2024). Frailty Syndrome. J Medical Case Repo, 6(2):1-2. DOI: <https://doi.org/10.47485/2767-5416.1081>**What is Frailty Syndrome?**

Frailty is the inability of the body to cope with everyday or acute stressors. The World Health Organization (WHO) defines it as **progressive age-related decline** in physiological systems that results in **decreased reserves of intrinsic capacity**. The individual becomes more sensitive to stressors, increasing the likelihood of a general decline in their health (WHO, 2015). Frailty increases the vulnerability of an individual, and the likelihood of hospitalization and death.

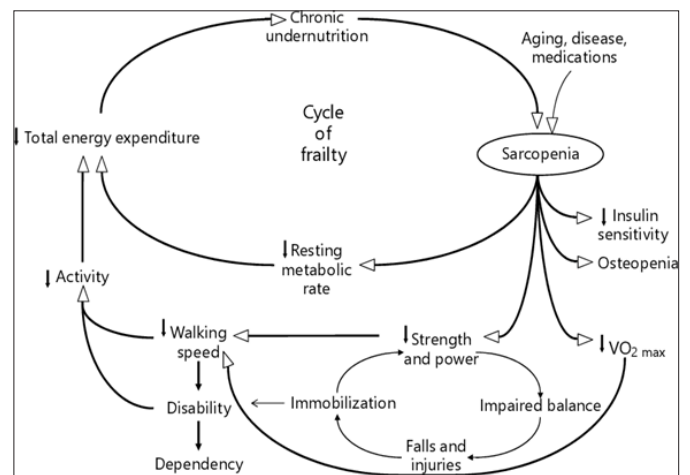


The first instance of the use of “frailty” as a syndrome is encountered in a journal article by Walston & Fried in 1999 on “Frailty and the older man” (Med Clin North Am. 1999 Sep;83(5):1173-94).

According to Fried and colleagues (2001), frailty syndrome meets three or more out of the following five phenotypic criteria:

- Reduced muscle strength
- Balance, walking issues
- Fatigue
- Unintentional weight loss
- Low energy

Apart from the system proposed by Fried and colleagues, a Frailty Index has also been established. It is a high-risk index that adds up various deficits that may develop over time, such as various diseases, physical and cognitive deficits, geriatric syndromes and dangerous psychosocial factors. For many, it is considered a more sensitive tool, as deviating conditions are easier to detect.



FRAIL Questionnaire

The next diagnostic tools to detect frailty is the FRAIL Questionnaire. It is made up of 5 simple questions as listed below.

The Simple FRAIL Questionnaire Screening Tool

(3 and above = frail / 1 or 2 = pre-frail)

- Fatigue: Are you fatigued?
- Resistance: Cannot walk up 1 flight of stairs?
- Aerobic capacity: Cannot walk 1 block?
- Illnesses: Do you have more than 5 illnesses?
- Loss of weight: Have you lost more than 5% of your weight in the past 6 months?

Gérontopôle Frailty Screening Tool (GFST)

An additional diagnostic tool is the GFST. Specifically, the questionnaire determines whether a patient is frail or not, and whether they have to be referred to a dedicated unit where the frailty may be treated.

Determining factors for frailty onset

- Inadequate dietary intake for the human body (malnutrition).
- Pharmaceutical treatment that includes intake of at least 5 medications at the same time (polypharmacy).
- Musculoskeletal disorders, such as sarcopenia, characterized by a decrease in muscle mass and strength, and osteoporosis, characterized by bone microarchitecture disruption and increased risk of fracture, as well as the causes that lead to the onset of these pathological conditions.
- Chronic inflammation and conditions/diseases that cause it.
- Reduced psychosocial support from the familial environment of the individual tested for the syndrome.

Vulnerable individuals may run a higher risk than the general population for

- Cardiovascular diseases.
- Endocrine, musculoskeletal and respiratory system disorders.
- Mental disorders, such as depression.
- Physical disability and permanent bed confinement.
- Adverse outcome and prognosis following surgical procedures.
- Repeated and prolonged hospitalization due to complications of the syndrome.

There are no commonly accepted frailty biomarkers yet. However, indirect testing may provide insights into this syndrome. This may roughly include blood tests for haematocrit, hormones, vitamins and inflammation. Adequate medical history and a physical exam are of major importance in setting the pace for further testing.

Potential Treatments

- Active intervention to improve the diet of vulnerable individuals, in collaboration with various specialties to jointly evaluate the presentation and other conditions.
- Encouragement for more intense physical activity through special exercise programmes.
- Treatment of endocrine disorders, if any, with suitable preparations each time.
- Support from experts to improve the mental profile of vulnerable individuals, in collaboration with their familial environment.



References

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