CHAPTER – 20

Conclusion

Older adults are a diverse collection of people. Their health and functional status vary dramatically throughout their lives, based on genetic, biological, and environmental factors, as well as other physical, psychological, and social aspects. As a result, people of the same chronological age can have biological ages that differ.Frailty is gaining traction in the scientific community as a tool to better understand health disparities among the elderly. Because of the similarities and high coexistence rate of these descriptive categories, the terms frailty, ageing, disability, and comorbidity were practically interchangeably employed in the past. Frailty, ageing, disability, and comorbidity, on the other hand, have distinct characteristics. To begin with, advanced age does not always imply vulnerability to the bad health consequences associated with frailty. Frailty is connected with poorer socioeconomic position in adulthood and is at least partly programmed in early life. Second, frailty is defined as a state of reduced physiological reserve and diminished ability to maintain homeostasis as a result of several, compounded deficiencies caused by ageing. When exposed to an internal or external stressor, frail elderly persons are especially sensitive to negative health effects. Third, whereas frailty refers to instability and the possibility of losing function, disability is defined as a loss of function that is generally measured by difficulty or dependency in doing activities required to live freely.Finally, having two or more medically diagnosed diseases is referred to as comorbidity. Frailty, on the other hand, is distinctly distinct from advanced age, disability, and comorbidity.

Identifying and Measuring Frailty:

There are several indices to identify and grade the severity of frailty. The following table summarizes the various indices (Table 1).

Table 1: Some of the Frailty indices

Frailty index given by Rockwood and Mitnitski
Rockwood-Robinson Frailty Index
The Simple "FRAIL" Questionnaire Screening Tool
Fried Frailty Phenotype (FFP) and Frailty Index (FI)
Modified Frailty Index (mFI)
Risk Analysis Index(RAI)
Edmonton Frail Scale (EFS
Cumulative Deficit Model (CDM)
Comprehensive Assessment of Frailty (CAF)

Clinical Implication of Frailty:

Frailty is very common, and it's linked to worse outcomes and higher health-care expenses. Frailty's global influence is projected to grow as the world's population ages. As a result, dealing with weakness is a pressing public health issue. The response should be a collaborative effort of older adults, health-care professionals, researchers, and policymakers in both high-income and lower-middle-income countries, where the population is ageing at a faster rate than in many high-income countries, and where resources are limited and health-care access is restricted.

In the last few decades, significant progress has been accomplished. Frailty research has exploded, and frailty awareness is now common across medical fields. Nonetheless, translating research into clinical practise will continue to be a difficulty in the future years. The on-going dispute about frailty assessment instruments isn't helping matters. The development of a few particular tools for certain situations, based on frequently gathered data, could potentially increase the acceptability and feasibility of frailty screening in clinical practise.

Longitudinal research, including analyses of trends and trajectories, as well as randomized controlled trials concentrating on therapies for older persons with frailty, is a high priority for the frailty research agenda. The use of a life-course approach may help us better understand how frailty and its risk factors emerge during earlier stages of life, as well as contribute to the creation of public health measures targeted at preventing frailty and its negative health consequences. This study will eventually lead to an increase in the well-being of frail older persons.

Frailty and Anesthesia:

Frailty is an important factor to notice in older surgical patients, and it can be quantified using a variety of tools. The FFP and the CDM are the two most used ways to assess frailty. Frailty is linked to increased surgical mortality and morbidity, and it may influence the perioperative anaesthetic strategy employed. In the literature and in clinical practise, the use of general anesthesia (GA) against regional anesthesia(RA) is fiecrcely contested, with no clear consensus. Individual deficits, probable complications, and surgical goals should all be addressed in a perioperative treatment plan for the frail patient. The advantages of RA for surgery and postoperative analgesia should be evaluated, and the anaesthetic approach used should be tailored to the patient. There is some evidence that CGA can improve results in the preoperative environment.

Prehabilitation in Frailty:

Prehabilitation is a relatively new idea that is increasingly being utilized to intervene on frail patients and improve their physical function and mental state prior to elective surgery. Collaboration between the treating teams and the patient is critical in developing a perioperative care plan that includes everything from preoperative planning to acute medical admission, rehabilitation, and discharge planning. The time has come to adopt a systematic frailty assessment in older

surgical patients, as well as paths for tailored management, which should include a discussion of the possibility of long-term unfavourable outcomes and non-operative treatment options.

In handling the ageing and frail surgical population, clinicians across the spectrum of care encounter new challenges. Frailty is a useful risk classification measure for elderly individuals because it better depicts their condition of increased susceptibility. It can make it easier to identify patients who would benefit from specific interventions. Nevertheless, multimodal prehabilitation is a practical and promising technique to addressing these issues, but larger-scale researches are needed before it can be widely used.

Frailty and Surgery:

Independently and through increased complications, frailty is a significant risk factor for readmission after elective, outpatient surgery. Frailty was linked to higher mortality, post-operative complications, a longer length of stay, and discharge to a residential care facility in patients over 75 years old. Frailty and 30-day mortality had the strongest indication of relationship. Regardless of the type of surgery conducted, the connection remained similar across multiple frailty instruments.

In summary, elderly patients undergoing any type of surgical procedure, frailty predicts mortality, postoperative problems, and institutional discharge. According to various researches and the data available, certain characteristics of frailty may be responsive to intervention, which could potentially lessen negative effects.

Take home messages:

- Frailty is linked to a variety of negative outcomes and higher health-care expenses.
- Frailty can affect humans of any age, but it is more common among the elderly.

- Frailty's global impact is predicted to grow as the world's population ages, particularly in low- and middle-income countries.
- A wide range of socio-demographic, clinical, lifestyle-related, and biological factors all have a role in the onset of frailty.
- In primary, secondary, and tertiary disease prevention, taking into account a person's degree of frailty in clinical practise could result in more patient-centered treatment and the avoidance of harm.
- Despite the fact that the notion of frailty is becoming more widely employed in primary, acute, and specialised care, translating research into clinical practise will remain a problem in the future years; specificity and standardization of frailty measurements are critical for advancement.
- Longitudinal research on trends and trajectories, as well as randomized controlled trials focused on frailty prevention or therapy, are high priorities on the frailty research agenda.
- Taking a life-course perspective could help us better understand how frailty and associated risk factors develop in early stages of life, as well as contribute to the development of new treatments.