EDUCATION CORNER

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Frailty Among Kidney Transplant Recipients A Crucial Component of the Patient Evaluation

What is the Clinical Definition of Frailty?

The frailty phenotype is a multi-component syndrome in which three or more of the following criteria are met:

- Unexplained weight loss
- Decreased walking speed
- Decreased grip strength
- Low physical activity
- Exhaustion



Are Frail Kidney Transplant Candidates at Risk of Poor Outcomes?

Kidney Transplant Candidates, regardless of age, are highly vulnerable to adverse events while awaiting a transplant. In kidney transplant candidates, frailty is associated with increased odds of fair or poor HRQOL (Health-Related Quality of Life) at the time of evaluation. Frail candidates have the steepest decline in HRQOL while waiting for a kidney transplant. Additionally, these candidates are at an increased risk of waitlist mortality.

Are Frail Kidney Transplant Recipients at Risk of Poor Outcomes?

Recipients who are frail are at high risk for adverse post-KT outcomes. When measured at the time of admission for KT, frailty is associated with increased risk of longer length of stay (2+ weeks), post-transplant delirium, early hospital readmission within 30 days of discharge, delayed graft function, MMF (mycophenolate mofetil) intolerance, and mortality.

Which Kidney Transplant Recipients are Likely to Become Frail?

Contributing Factors

- Age (The older the recipient, the more susceptible to frailty)
- Instrumental Activities of Daily Living (IADL) Disability
- Center for Epidemiological Studies Depression (CES-D)
- Low educational ascertainment
- Self-reported HRQOL

Non-Contributing Factors

- Sex
- Race
- Obesity
- Smoking Status
- Cause of End Stage Renal Disease (ESRD)
- Duration of they Dialysis Treatment
- Donor Type

Frailty Assessments Help Improve Recipient Selection

Incorporating a frailty assessment into the kidney transplant evaluation aids transplant surgeons in:

- Accepting marginal candidates who are robust
- Deciding against transplanting candidates who will not tolerate transplantation
- Identifying older patients who will benefit from transplant despite their age
- Identifying candidates who may need prehabilitation



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