

Assessing Frailty in Pre-Liver Transplant Patients

Introduction/Problem

Patients awaiting liver transplant are complex with multiple comorbidities and high mortality risk. Literature suggests improved outcomes in patients who are less frail in the pre-transplant stage. Assessing these patients for frailty is often difficult and commonly completed by using the "eye ball" test. The lack of objective measures to identify these patients may result in higher risk patients being overlooked leading to a greater degree of frailty and post-transplant complications/mortality.

Aim/Goal

Use of the Liver Frailty Index can help identify patients who are frail with the intent to optimize both their nutrition and physical status while on the liver transplant waiting list. Those scoring "pre-frail" or "frail" should be referred to physical therapy and transplant nutrition. Our goal is to keep patients healthy and transplantable while waiting for their new gift.

The Team

- Michael Curry MD
- ➢ Ghideon Ezaz MD
- Louise Riemer RN
- Jillian Ng PT
- Mary Stone
- Audrey Paradis RD



The Interventions

- Practice assistants were instructed on how to conduct the 3 individual tests
- An ipad was purchased to allow for easy input at the time of testing
- High risk patients are identified the evening before clinic by the nurse coordinator and emailed to the practice assistants
- These patients are tested in an exam room after vitals are taken
- Results are printed out and provided to the doctors at the time of visit and then scanned into OMR under "outside records" by practice assistants
- Patients deemed "frail" are referred to outpatient physical therapy
- Patients deemed "pre-frail" are provided with a handout that provides some simple exercises to complete daily at home

Beth Israel Deaconess Medical Center – Transplant Institute





- Libby Fortune
- Maylis Castillo
- Maria Castillo-Facey
- Maria Rodriguez
- Juan Garcia
- Kate Marx \succ
- Naomie Capre

Strength measured by squeezing 3 times using dominant hand

Time to complete 5 sit to stands without the use ofarms

There are inconsistencies between how tests are being preformed between practice assistants so frequent meetings are communication were key Space is limited to perform these tests causing inefficiencies

- Increase staff to allow for this testing to be completed on a larger scale
- Determine appropriate timeframe for re-testing
- Expand to using with kidney and pancreas patients
- Allow for easier viewing of completed test in OMR and moving away from scanning these documents

The Results/Progress to Date

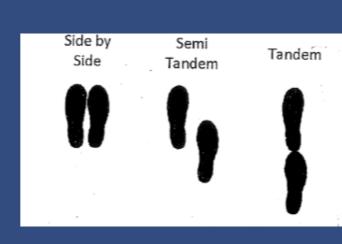


Sit to Stand



Balance Test

| FINCTIONAL ASSESSMENT | nent | | | |
|--|---------------------------|------------|-----|----------|
| Liver Frailty I | ndex | | | |
| Inputs: For instructions, see (i) below. | | | | Results: |
| 1. Gender: O Ma | le 🔿 Female | | | |
| 2. (i) Dominant hand grip strength (kg): | | | | The Li |
| attempt 1: | attempt 2: attempt | ot 3: Avg: | | Decim |
| | | | kg | |
| | | | | |
| 3. (i) Time to do 5 chair stands: | | | | |
| 4. (i) Seconds ho | Iding 3 position balance: | | | |
| Side: | SemiTandem: Tand | em: Total: | | |
| | | | sec | |
| | | | | |



Seconds holding each of these 3 positions

After filling out the appropriate information in the calculator, a frailty index score will be provided with a score of 1-5.

> **Robust = 1-3.2 Pre-frail = 3.2-4.49**

Lessons Learned

Next Steps



For more information, contact: **Transplant Institute: 617-632-9700**

TAP TO GO BACK TO KIOSK MENU

er Frailty Index is precision:



DONATE