

Exercise: A key component for success when preparing for and recovering from Liver Transplant

Gil Spitz, MS

Exercise physiologist,
Baylor/St. Luke's Medical Center
Liver Transplant Program



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Gil.spitz@commonspirit.org

Intro

- Music
- Exercise Science
 - PT
 - Research
 - HPL
- Corporate Fitness
- Teaching
- Private Clients
- ICU
- Liver Transplant



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TLG

- Tube Feed
- Liver
- Gil



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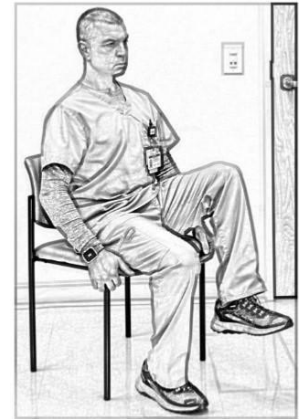
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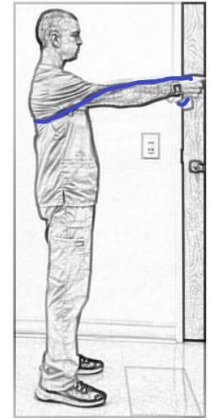
TLG-translated

- Tube Feed
 - Nutrition
- Liver
 - Functioning allograft (and no infection)
- Gil
 - Exercise



History of the role:

- Increased LOS
 - Lack of mobilization
 - Medical missed visits
- Report directly to txp team
- Work under MDs license



Minimal Athletes

Limitations:

- Physical
- Physiological
- Medical
- Pharmacological
- Surgical



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Surgical Truths

- More Muscle=More Good
 - Physical reserve
- EFM reduces
 - LOS
 - Blood clots/DVTs
 - HAIs
 - Pneumonia
 - Infections



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“The Talk”

- What does the liver do?
 - Manages blood glucose
 - Breaks down fats (beta-oxidation)
- Liver malfunction
 - Nutrient blindness
 - Preferentially metabolizes protein



“The Talk”

- Job 1-eat
 - Sufficient protein
 - Caloric surplus
- Job 2-exercise
 - Reduced/reverse muscle loss
 - Upregulate growth hormones
- “Control what you can control”



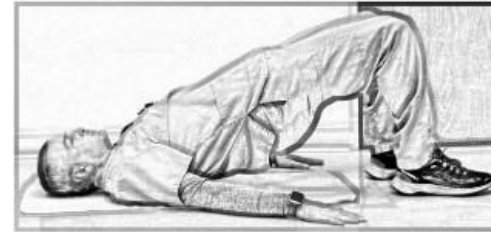
Importance of Muscle Mass Post-Op

- Makes EFM less difficult
- Muscle's role immune response
 - Reduced mass=reduced response
- Physical reserve
 - Caloric reservoir post-tp



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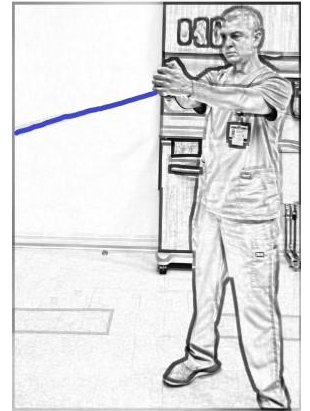
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Frailty

- Fried Frailty Phenotype
 - 5 points (0 or 1)
 - 2 Subjective
 - Lack of energy
 - Difficulty w/demanding tasks
 - 3 Objective
 - Grip strength
 - 5M walk test
 - Inadvertent weight loss



Frailty

- Acute or chronic?
 - Recent?
 - Last time independent?
- Mentation?
 - Confusion/encephalopathy
 - Coordination vs strength



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How Do You Feel About ...?

- Yoga (pilates, swimming, zumba, etc.)
- My narrow lane
 - Health, wellness, fitness

VS

- Liver transplant



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Prescribing Exercises

- Hypertrophy
 - Strength
 - Endurance
- Walking
 - 30 min/day
 - Aim for 7,000+ steps/day
- Considerations
 - Uncorrected hernias
 - Bone fractures
 - Hypotension
 - Mentation



Prehabilitation

- Exercise guides
- Video library
- Spanish translations
- Participation in Prehabilitation
 - Decreases complications by 37%
 - Improves Self efficacy or Grit
 - Bone health
 - LOS
 - Lung Txp- 5 days



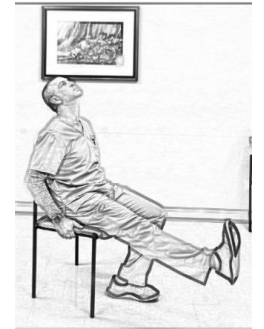
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Rehabilitation

- Early frequent mobilization
 - Reacquaint
 - Immediately post-extubation
 - Multiple sessions/day
- Potential limitations
 - Devices
 - Hemodynamics/pressor requirements
 - Termination criteria
- Follow throughout hospitalization
- Sign off on discharge



My Super Power-Continuity of Care

- Assessment
- Exercise prescription/intervention
 - Virtual pre-hab
- Follow-ups
- Post transplant mobilization
 - First contact
- Post discharge care



Collaboration

- Talk to everyone and anyone
- Opportunities for research
- Email me!

or

- Find me on LinkedIn



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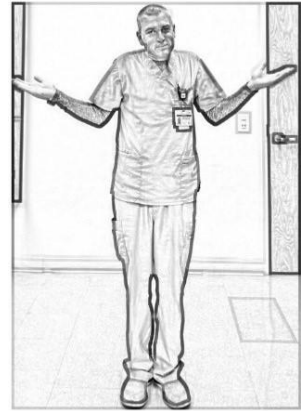
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Questions?



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