

REHABILITATION IN PARKINSON'S DISEASE

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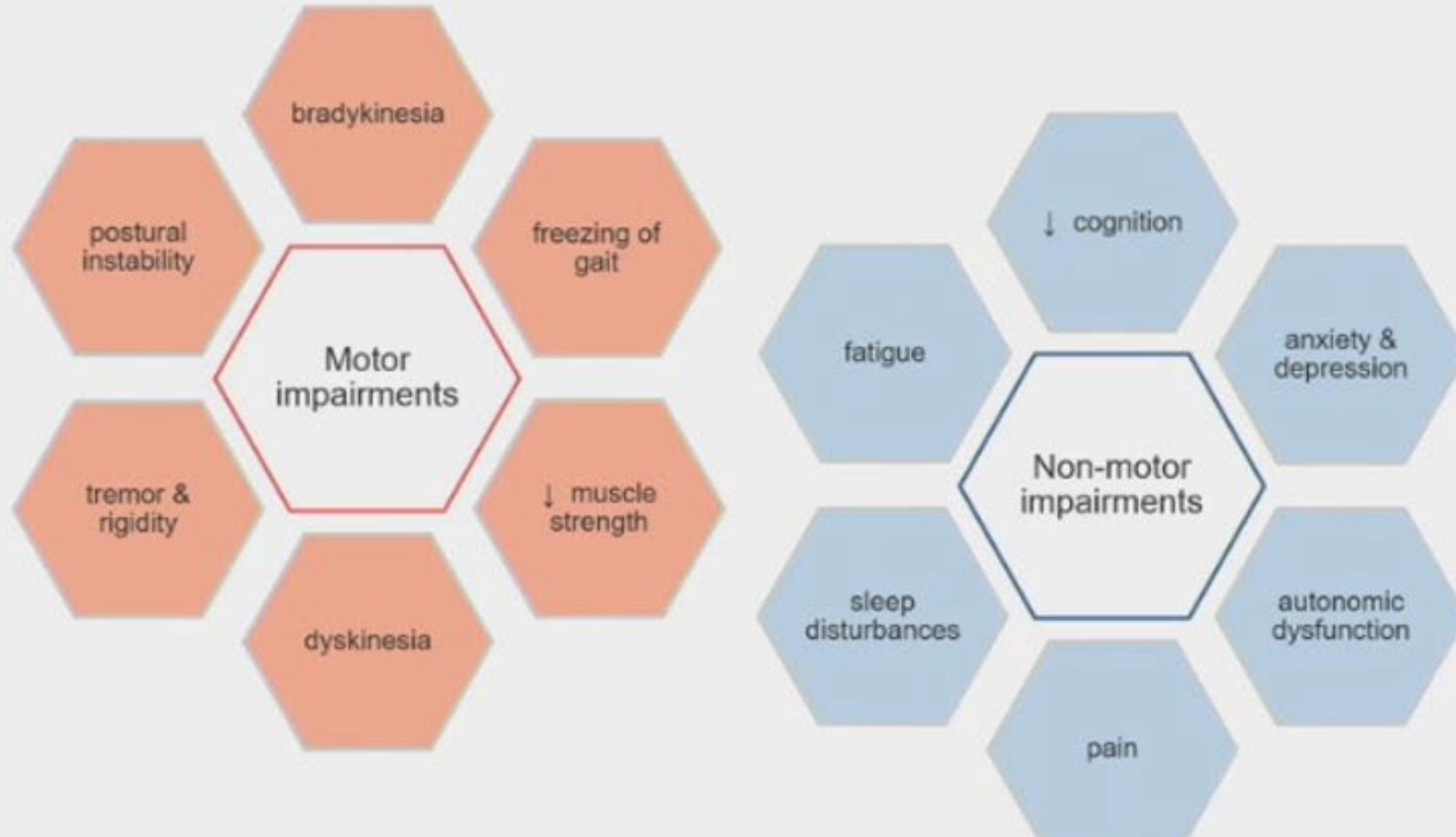
Parkinson's Rehabilitation Program

Glen Cove Hospital

PARKINSON'S DISEASE IN THE US

- Estimated up to 1.2 million people affected in the US
- By 2035, number of cases is expected to double
- Fastest growing neurological disease in the world with 95% are over age of 65 (Medicare eligible)
- Hospitalization Rate – 1.5 times higher than in non-PD population
- 60% of PD patients will experience at least one fall and 39% have recurrent falls
- 76% of falls will require medical care and 33% result in fracture
- Among patients with fractures, the mortality rate is 10.6%

Motor and non-motor impairments contribute to disability



REHABILITATION OPTIONS

Proactive Therapy in early stages of PD is most helpful

Restorative Therapy for functional improvement in any stage of PD

Maintenance Therapy for long-term monitoring in advanced PD

PROACTIVE THERAPY

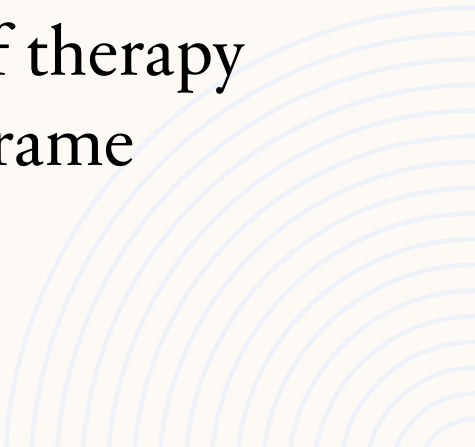
- 4 visits within 6-12 month intervals
- Utilizes all disciplines of therapy and takes place in the outpatient setting (office or in home)
 - PT
 - OT
 - Speech Therapy
- May also implement self-therapy such as boxing or dance classes.

RESTORATIVE THERAPY

2-4 visits per week for 4-12 weeks as outpatient therapy

Inpatient acute rehabilitation in a hospital setting about 3 hours of therapy 5 days a week for about 2 weeks

Inpatient subacute rehabilitation in a nursing home setting 1-2 hours of therapy 5 days a week for extended time frame



MAINTENANCE THERAPY

1 visit every 1-3 months, ongoing in office or in home

Utilized in late stages of PD to prevent further decline

TYPES OF OUTPATIENT THERAPY

- **•Amplitude training**
- LSVT BIG
- LSVT LOUD with EMST
- Speak out Program
- **•Reciprocal patterns and aerobic exercises**
- **•Treadmill walking**
- **•Stationary cycling**
- **•Elliptical machines**
- **•Nordic/poll walking**
- **•Hydrotherapy - swimming**
- **•Dance - Brazilian Samba**
- Tai chi
- **•Resistance training with muscle strengthening and stretching**
- **•Balance therapy and gate training**
- **•External cued therapy**
- **•Visual cues**
- **•Verbal Cues**
- **•Rhythmic auditory cues (metronome, chanting, music)**
- **•Task specific training**
- **•Community based exercises (Dance for PD, Rock steady boxing, etc.)**
- **•Integrated care**

REASONS FOR INPATIENT THERAPY

Fall with injury

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graph TD; A[Fall with injury] --> B[Medical decline related pre-existing conditions such as high blood pressure, or new conditions such as stroke or heart attack]; B --> C[Post-surgery for orthopedic related surgeries (ie. Knee replacement)]; C --> D[Infections];
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Medical decline related pre-existing conditions such as high blood pressure, or new conditions such as stroke or heart attack

Post-surgery for orthopedic related surgeries (ie. Knee replacement)

Infections

TYPES OF THERAPY



Physical Therapy – focuses on larger movements such as walking and transferring



Occupational Therapy – focuses on fine motor movements such as dressing, eating, going to the bathroom, washing/bathing

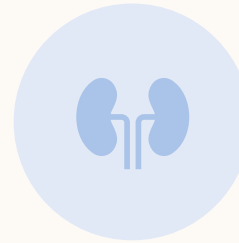


Speech Therapy – focuses on projection of voice, speaking clearly, and cognition thinking

MEDICATION ADJUSTMENTS



Adjustments to parkinson regimen of levodopa containing medications



Adjustments to blood pressure regimen to avoid orthostatic hypotension



Adjustments to mood stabilizers to help with motivation and engagement in therapy



Adjustments to sleep regimen to help with related hallucinations or sleep disorders

QUESTIONS





THANK YOU

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