

Therapist protocol for Parkinson disease

History

Focus on history of freezing episodes, tremors, bradykinesia, rigidity, falls during medication on or off times, dropping items, fine and gross motor coordination, difficulty swallowing/talking loud/ memory, HEP, time schedule for meds. Be aware of nursing Morse Falls Scale number (>45 indicates falls risk). If staging is used by MD for diagnosis, be aware of Hoehn and Yahr stages 1-5 (good resource is Quick Reference to OT or PT by Kathryn Reed).

Evaluation

If already diagnosed, use UPDRS Parkinson form on neuro page of electronic medical record.

Occupational therapy

- Standard ADL/IADL evaluation (coordination, strength, sensation, tone, AROM, PROM)
- Consider Robnett's Home Safety Evaluation
- Cognitive Performance Test
- Measure coordination, grip and pinch strength (9 hole peg, graphics, Box and Blocks, dynamometer/pinch meter), reciprocal UE movements
- Vision eval (diplopia, visual contrast sensitivity)
- Attention to: loss of balance, rigidity, forward posture, bradykinesia, freezing, speed of movements, motor planning, sensory processing and vision during ADL/IADL
- Driving screening

Physical therapy

- Standard PT evaluation (functional mobility, strength, sensation, tone, AROM, PROM)
- Consider Functional Reach (10 inches or less=falls risk) or Sharpened Romberg (Less than 30 seconds=falls risk) or TUG
- Gross motor coordination
- Gait pattern, balance and falls risk/hx or reciprocal LE motions
- Attention to: loss of balance, rigidity, forward posture, trunk mobility/ flexibility, bradykinesia, freezing, motor planning, sensory processing during mobility, problem solving sequencing of tasks

Speech therapy

- Standard swallow and communication/cognition evaluations
- Emphasis on: Oral/motor movements, voice and vocal volume, speech intelligibility
- Videofluoroscopic swallow study as indicated

Treatment considerations

- Provide PD educational material as appropriate
- Collaborate with RN about Parkinson's medications and timing with therapy
- Document in POC the best time of day for patient tx and modify schedule accordingly
- Time your documentation as MD is adjusting meds
- Home safety eval in the hospital
- Consider IRP, OP referral, VNA eval and treat order
- Collaborate with SW for D/C needs
- Involve family and caregivers
- Treatment equipment to consider: music, metronome
- Encourage loud voice and big movements
- Monitor BP due to orthostatic hypotension issues
- Make note of performance during medication "on" and "off" times and work on rehab strategies for both
- Break down tasks, initially avoiding challenges of dual tasking

Occupational/physical therapy

- Focus treatment sessions on: controlled fluid reciprocal movements, use of conscious techniques to avoid freezing, big/increased amplitude movements, postural trunk strengthening in all positions, focus on strengthening extension and stretching flexors
- OT assistive devices/adaptive equipment to consider: handwriting guide
- PT assistive devices/adaptive equipment to consider: PD laser walker (U-step) or cane
- Use of Wii
- Use key phrases like "big, loud" or (example: Stop, Think, Shift, Heel – Stop to clear mind, Think about next step, Shift weight, Heel strike)
- Break up rigidity first. If very stiff – start with eyes then work distal to proximal
- Relaxation – sitting is more effective than standing
- Balance-focus on anticipation, changing surfaces
- Chest expansion-breathing patterns, PNF

Speech therapy

- Focus on loud voice and increased speech intelligibility
- Sound level meters, voice amplification, visi-pitch
- Use key phrases like "big, loud"

General education

- Freezing in PD; x24940
- Comprehensive PD Exercise Program (x35412)
- Aurora Libraries: Learn More About Neurological and Parkinsons Disease (x34069aa)
- LSVT (Lee Silverman Voice Treatment) – LSVT BIG and LSVT LOUD by LSVT certified staff (see PM&R website)
- Skylight video, under “Health Videos” entitled “*Parkinson Disease - What Can Rehab Do for YOU?*”

Occupational therapy

- Scapular Mobility: Shoulder blade squeezes (x21551)
- Shoulder rowing with T-band (25974)
- Shoulder diagonal with T-band (x25963)
- Shoulder Isometrics (x17147)
- Shoulder/Chair push-ups (x08332r67)
- UE Strength: UE T-band (x36050)
- Hand coordination (x19014),
- Pecs stretches and shoulder circles: supine x20548 sitting (08332r12), sitting circles (x24626)
- Trunk: see PT section/coordinate tx with PT
- Energy Conservation: x15882 and x 26162

Physical therapy

- Transfers: bed x20530, chair x21545
- Gastroc/soleus: Heel raises (x08332r144)
- Quad strength: mini-squats (x08332r142), sit to stand (x08332r139), leg press T-band (x08332r124)
- Glutes: bridge(x08332r109), retrostepping (exercise 3 in x20522)
- Heel cords: calf stretch (x21549)
- Hamstring: stretch (x21550)
- Hip Flexor: stretch (x08332r94)
- Cervical: Chin tuck (x08332r02), HEP (x11634), ROM/Isometrics (x08482), rotation (x21553)
- Core stabilization/rectus: x22933, POE (x08332r75), Back extension (x08332r79), four point (x08332r70)
- Trunk rotation: hooklying (x20549), shoulder diagonals (x20536), Lumbar wt shift (x20525)

Staff resource

Learning Connection PD modules –
(class codes: 1001355PARKTHER, 1001355PARKTHER2
and 1001355PARKTHER3)