



PARKINSON'S DISEASE

SPOTLIGHT ON PARKINSON'S DISEASE: ROADMAP TO THE FUTURE

WEDNESDAY, OCTOBER 21, 2020

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WELCOME AND INTRODUCTIONS



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PRESENTATION



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FINANCIAL DISCLOSURES

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Equity & Consulting Agreements: None

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SOME ALARMING STATISTICS

- PD on increase
- PD results in loss employment
 - Retire 4-7 years earlier
- Less than 1/2 of PD patients treated by neurologist
- PD mortality higher than once thought
 - About the same as having a heart attack
- Skilled nursing used by 44%

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PALLIATIVE CARE PRINCIPLES

- Focus on the person rather than disease
- Relief of suffering
- Quality of life not quantity
- Often involves care partner or caregiver
- Intensive management of complex symptoms
- Often uses a team approach

"Palliative care is about living as well as you can for as long as you can"
Dr. Steve Pantilat, Director of UCSF Palliative Care Program

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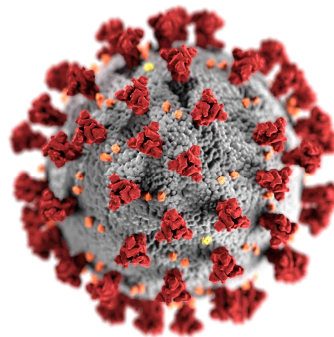
TIME FOR PALLIATIVE CARE

- Time of diagnosis
- Change in level of function
 - After fall, illness or with cognitive decline
- Assistance with ADLs
- Psychological issues
 - Depression, anxiety
- Care partner distress
- Hospice

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PARKINSON AND COVID

- PD and risk of infection
- PD and risk of adverse outcome
- Social impact on PD



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TIME OF DIAGNOSIS

- Research
- Education
- Consideration of work and hobbies
- When to start PD medication

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RESEARCH

Parkinson's Disease Pipeline 2020 (McFarthing, 2020)

- 145 active phase 1-3 clinical trials
 - 37 (26%) Phase 1
 - 14 (10%) Phase 1/Phase 2
 - 61 (42%) Phase 2
 - 28 (19%) Phase 3
- 57/145 (39%) were disease modifying trials
- 88/145 (61%) were symptomatic treatment trials

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RESEARCH

Disease Modifying Trials

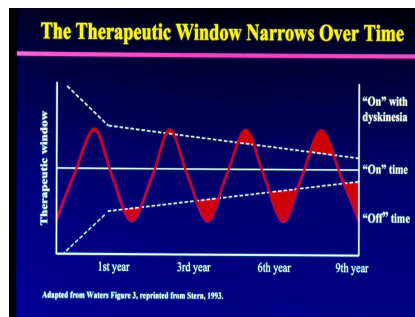
- Kinase Inhibitors
 - Inhibitors of LRRK2, c-Abl, Src/Bcr-Abl
 - ASO LRRK2
- Immunotherapy- MAB against alpha-syn
- Gene Therapy- dopamine and growth factors
- GLP-1 agonists (several used in DM)
- Glucocerebrosidase targeting
- Weird things – fungal extracts, botanicals, microbiome

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EDUCATION

MOTOR Symptoms

- Tremor
- Rigidity
- Bradykinesia
 - Slow movement



Most remain stable for about 5 years and then progress

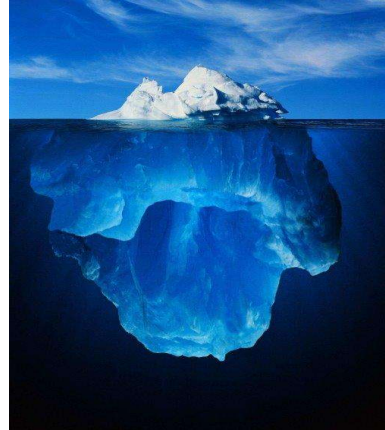
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EDUCATION

NON-MOTOR Symptoms

- Mood
- Sleep
- Bowels
- Bladder
- Blood pressure
- Sense smell
- Cognition
- Hallucinations
- Compulsive behaviors
- Skin
- Fatigue



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ADDRESSING WORK AND HOBBIES

- PD may cause symptoms that are visible
- PD may cause changes in voice
- PD may cause difficulty getting thoughts out
- PD may cause fatigue
- PD may cause balance problems
- PD may cause trouble with hand coordination

All these things may affect work and hobbies.

Advice: Do what you can now but have a plan B and C

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WHEN TO START OR ADJUST PD MEDICATION

Main goal is to reduce the symptoms (not signs) of PD with the least amount of side effects

- Reduce disability
 - Occupation, gait, chores, ADLs
- Socially disabling symptoms
 - Tremor
- Reduce complications of PD
- Almost all medications approved to treat PD work on motor symptoms of PD

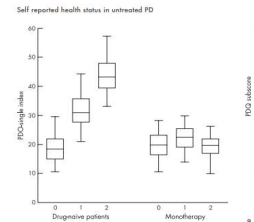


Figure 2 Mean (95% CI) Parkinson's Disease Questionnaire (PDQ-39) Summary Index scores in patients initially drug-naïve or baseline but who received oral PD drug treatment between the first and second follow-up consultation (n=53). There was a trend towards worsening between baseline and the first follow-up (mixed ANOVA, $p < 0.05$) and thereafter a trend to improvement. For patients who reported drug-naïve throughout the follow-up period ($n=41$), the PDQ-39 Summary Index determined significantly at each visit (mixed ANOVA, $p < 0.01$) mixed ANOVA. The horizontal line within the box represents the median value, with the edges of the box representing the lower and upper quartiles, the whiskers display the range.

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TREATMENT PRINCIPLES

Early treatment

- MAO inhibition (rasagiline/selegiline)
- Agonist vs. levodopa
 - Agonist for young PD
 - Levodopa for older PD
 - Most end up on both
 - No difference after about 7-10 years follow-up

Advanced disease

- Add-on therapy
 - Motor fluctuations and dyskinesia
- Lots of research

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NEW PD MEDICATIONS

- Safinamide (Xadago): a new MAOI FDA approved March 2017
- Opicapone: COMT inhibitor FDA approved July 2019
- Inbrija inhaler FDA Approved December 2018
- Apomorphine FDA approved in 2004, 2020
- Istradefylline (Nourianz) FDA Approved August 2019

Medication for Off time and levodopa-induced dyskinesia:

- Gocovri (Amantadine ER) FDA Approved August 2017
- Osmolex FDA approved 2018

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EXERCISE

- Resistance training in PD
 - Improves muscle strength
 - Reduces instability
 - Decreases falls
 - Improves QOL
- Aerobic exercise in PD
 - Treadmill, cycling, walking
- Stretching in PD
- Combination of resistance training and aerobic is likely best
- Helps fatigue!!

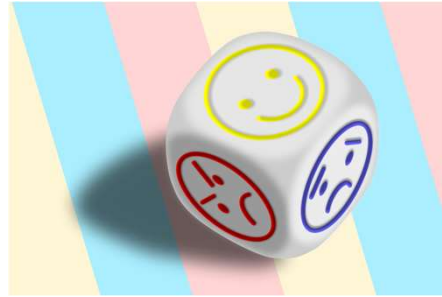


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ADDRESS MOOD

- Depression and anxiety in 40-50%
- Peaks in early PD and more advanced
- Independent predictor of quality of life
- Treatable!
- Lots of options
 - SSRI, SNRI, TCA



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ADDRESS SLEEP

Most people with PD don't sleep well

- Many causes
 - Motor, bladder, pain, mood, OSAS, RLS, RBD, primary
- Good sleep hygiene first line defense

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GOOD SLEEP HYGIENE

- Get rid of false beliefs
- Avoid caffeine and nicotine close to bed
- Don't use alcohol as sleep aid
- Avoid evening fluids
- Avoid evening diuretics
- No long naps
- Exercise early in the day
- Sleep and wake at the same time
- Keep room cool and dark
- White noise
- Avoid the late evening news/scary movies
- Once up, let light in
- No OTC meds unless you talk with your doctor

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DON'T FALL

Really, I mean it: DON'T FALL!

- 55% of PD patients fell in the last year across all stages
- 33% of falls result in fracture (Parashos, 2002)
- Leading cause of nursing home placement
- Most are preventable:
 - Exercise, PT, OT, assess cognition, assistive devices, addressing bone health, addressing BP

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WHEN TO CONSIDER ADDITIONAL CAREGIVING

- Frequent falls
- Significant hands on care
- Needing help at night
- Cognitive issues
- Needing assistance with medications
- Can't leave patient alone

Options: In-home care, assisted living, group homes, traditional nursing homes, state programs, VA

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World Mortality Rate



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ADVANCED DIRECTIVES

- Only 9% of PD patient die in home (vs 17% elderly)
- 55% die in hospital
- Less than 1% receive hospice services

Why does this have to be?

- Talk with your families:
 - Not only about CPR and life support but also....
 - Where do you want your care?
 - Who do you want doing your care?
 - Hospitalization and end of life care

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SPIRITUALITY

“Are you at peace?” If not, why not?

- Spirituality is not just religion:
 - Purpose and meaning in life
 - Connection to self and others
 - Connection to nature
 - Connection to higher purpose
- 85% PD patient embarrassed, 26% have shame

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ADDRESSING SPIRITUALITY

- Be kind to yourself
- If you are a care partner, find joy in it
- If a patient who needs care, allow yourself to be cared for
- Meditate
- Breathe
- Practice mindfulness
- Acknowledge strong emotions
- Get support



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THANK YOU

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QUESTION & ANSWER



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CLOSING REMARKS



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ANSWERS TO YOUR QUESTIONS,
OR FOR ADDITIONAL RESOURCES**

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