Movement disorders in Primary Care

DEC 4, 2024

STEPHANIE LESSIG, M.D.

CLINICAL PROFESSOR AND VICE CHAIR

UCSD NEUROSCIENCES

Objectives

- Identify essential tremor versus Parkinson's tremor
- Comfort in initiating treatment of essential tremor
- Identifying symptoms consistent with parkinsonism/Parkinson's disease
- When to consider more urgent referral for parkinsonism/movement disorders

ET versus PD

- "Classic"= Tremor with action versus tremor at rest
- Bilateral versus unilateral (though dominant hand is often complaint)
- Comes to attention over years/noticed incidentally versus comes to attention over months
- For ET, no other clear difficulties (particularly speech and/or imbalance)

Appearance

- Video (ET v PD)

ET treatment

- 1st line- Propranolol (10mgPRN up to 240mg daily)
  - -Primidone (50mg BID up to 250mgTID)
- 2nd/3rd line – Gabapentin 100-1200mgTID
  - -Topiramate 25-50mg BID
  - -Clonazepam 0.25-1mgTID
- Getting desperate
  - -Leviteracetam 250-500mgBID
- Alternatives (devices, procedures)
  - -Cala trio (easy for medicare!)
  - - Focused ultrasound (FUS)
  - -DBS

FUS

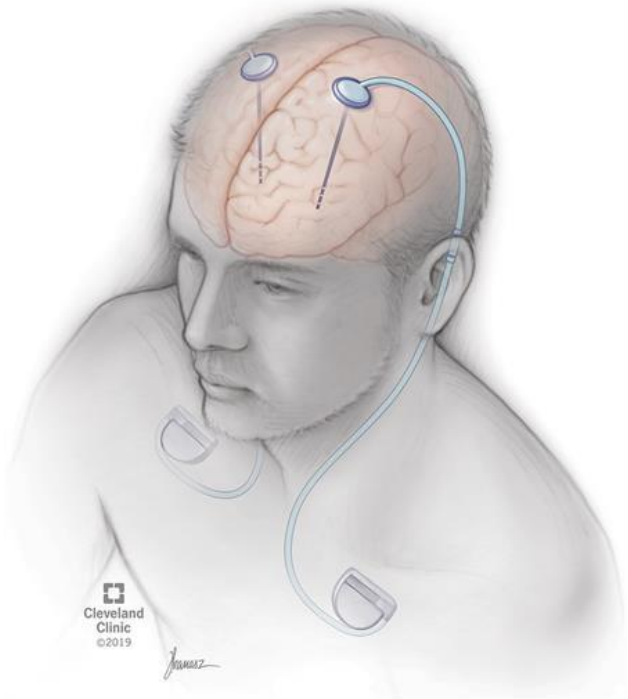
- Directed ultrasound beam at ViM (Ventral-InterMediate nucleus) of the thalamus
- (Closest available site right now Hoag Hospital)
- “Less invasive” (does not necessarily =) “Less side effect”

-intractable pain

Approved therapy in 2016

DBS

- Brain surgery, with hardware in the ViM
- Pacemaker-type battery in the chest
- Approved therapy since 1988



Parkinsonism

- Bradykinesia

And 1 of

- Rigidity
- Tremor (at rest, asymmetric, slower)

Movement symptoms

- Tremor
- Imbalance
- Motor fluctuations

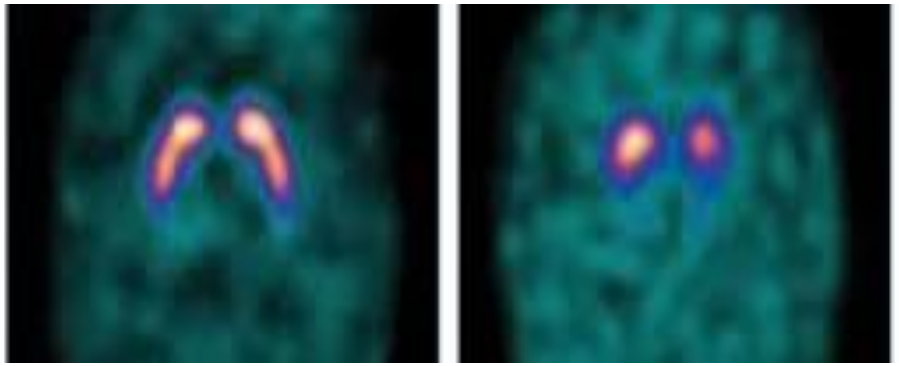
Non-motor features

- Dysphagia
- Sleep issues (REM Behavior Disorder, restless legs, OSA, insomnia, any)
- Depression/anxiety
- Cognitive impairment
- Psychosis (usually meds, visual hallucinations or delusions)
- Constipation
- Urinary dysfunction
- Orthostasis
- Double vision
- (Pain/sensory changes)

Work up

- Clinical diagnosis

- MRI brain for atypical features (NOT needed for referral)
- DaT scan for ET versus PD



Guidelines for treatment

- In (both) ET and PD, treatment is symptomatic, not curative
- These are lifelong conditions present for decades, so if patients can have some choice, allow it
- Treat what is dangerous first (i.e., falls, choking)
- Treat what is affecting QoL next (progressive loss of activities)
- Treat what looks bad last (i.e., dyskinesias often don't bother the patient)

Initial Treatment options

- MAO-B inhibitors
- Dopamine agonists
- Levodopa (Sinemet)

MAO-B inhibitors

- Rasagiline (Azilect®)
- Selegiline (Eldepryl®)
- Safinamide (Xadago®)

- Once/day
- Modest symptom benefit
- Potential drug interactions

Dopamine agonists

- Ropinirole (Requip® TID and XL)
- Pramipexole (Mirapex® TID and XL)
- Rotigotine (Neupro® patch)
- (Apomorphine- Apokyn® SQ)

- Moderate symptom benefit
- Best treatment for restless legs
- Side effects: Sedation, Compulsions

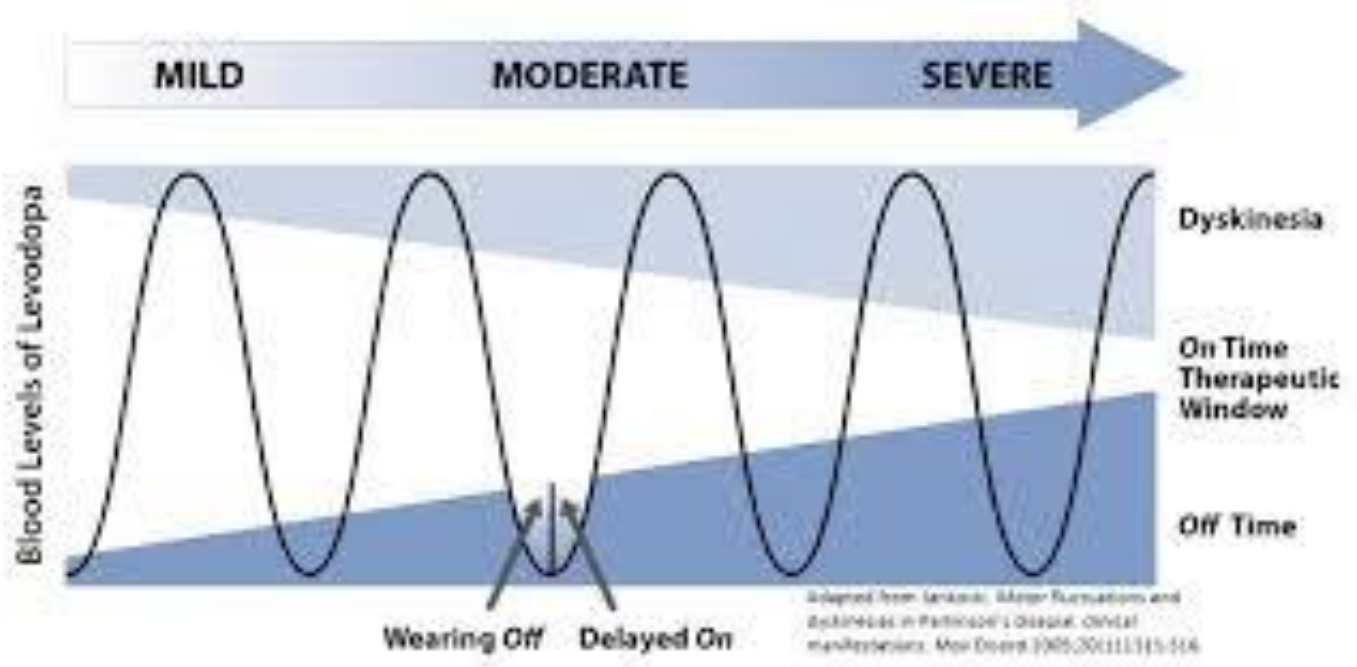
Levodopa

- Carbidopa/levodopa (Sinemet)
- Carbidopa= inert; allows levodopa to get to brain, prevents side effects of levodopa (nausea)
- Use formulations of 1:4 (carbidopa: levodopa); 25/100 versus 10/100

- Most robust symptom benefit with least side effect/interactions
- Immediate side effect- nausea, orthostasis
- Longer term- motor fluctuations

When to use levodopa

- When it's needed
- Fear- long term (50% develop complication after 5y)



Formulations of levodopa

- Sinemet “IR”= Immediate release
- Sinemet “CR” or “ER”= controlled- or extended release

- Rytary® 95, 145,195, 245 (#= levodopa; equivalent dosing 1.5-2x sinemet)
- Crexont® 140, 210, 280, 320 (equivalent dosing approx. 2.5x Sinemet)

Parkinson's devices- all for fluctuators

- FUS
- DBS

- Duopa® pump (continuous levodopa therapy via J tube)
- Vyalev® (continuous SQ levodopa infusion)

Idiopathic PD versus other

- Eye movement abnormalities (vertical gaze palsy) [PSP]
- Severe dysautonomia (orthostasis) [MSA]
- Visual hallucinations and/or dementia at onset [DLB]
- Triad of “wet, wacky, and wobbly” [NPH]

Urgent referral

- Sudden onset of symptoms
- Rapid (months) progression of disabling symptoms (i.e., falls)

Otherwise-

-Remember treatment is symptomatic, so not always necessary immediately, as this does not alter disease course.

-While ultimately patients feel better having a diagnosis, medically the disease is not going to change over weeks-even months in typical instances

THANK YOU!!!!

Stephanie Lessig

slessig@health.ucsd.edu

(858) 657-8540