

Parkinsonism

Dopamine ↓ substantia nigra ≠



Why?

MCC → 1. PARKINSON DISEASE: sporadic mutation

2. drug induced parkinsonism

Haloperidol, CPZ Dopamine ↓ / Ach ↑

Rx ⇒ BENZHEXOL / TRIHEXIPHENIDYL

3. Manganese Toxicity

normal PRESSURE Hypocephalus

4. N.P.H —

wet wobbly wacky

URINARY INCONTINENCE, **Magnetic** gait, reversible ^{*}dementia

*

secondary
2,3,4

Parkinson disease

Second MC neurodegenerative disorder

Damage at **SUBSTANTIA NIGRA: Basal ganglie #**

Neurotransmitter affected **Dopamine ↓**

*
Lead to inhibition of excitatory stimuli to thalamus :- **Paucity of Movement**

Must have criteria for diagnosis of PD → **Bradykinesia**
AKINETIC MUTISM



P
A
R
K
I
N
S
O
N

Pice Rolling TREMORS, 4-6 Hz, Asymmetrical
r ↑

AKINESIA

Resting TREMORS, Rigidity [Cog wheel]

BRADYKINESIA

INCOORDINATION

No xpression of face

slow speech

Drooling of saliva

Monotous voice

MASKED faces

Bradyphrenia

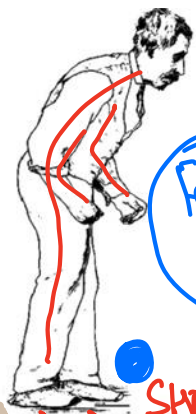
TREMORS: Resting: earliest

Rigidity Cog wheel

Bradykinesie *

Postoral instability

✓ STOOLED POSTURE

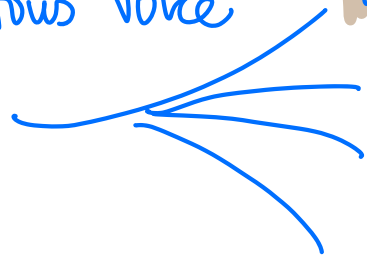


✓ arm swing ↓ -

Festinating gait

SHORT ✓
SHUFFLING steps

TRAP



Nursing interventions in PD

1. Assess ability to swallow and chew
2. High calorie, high-protein and high fiber diet
Soft diet and small frequent feeds and laxatives

3. Increased fluid intake ↑
4. Assist ambulation

* Low heel shoes and rock back and forth to initiate movement hold hands behind back to keep spine straight ✓ ✓

* MCC death in PD | AD = Pneumonia

gag Reflex, Cough Reflex
⊖ / ↓ ⊖ / ↓

Aspiration pneumonia

CONSTIPATION

"ON & OFF phenomenon"

fixed dose
↓
5. Levodopa and carbidopa combination is used P.D

Why not alone levodopa $\xrightarrow{\ominus \text{ P. decarboxylase } \ominus}$ dopamine in blood
carbidopa

$\nearrow \oplus$ CTZ: vomiting
 \searrow vasodilation
BP ↓

Why vitamin B6 should be avoided in PD

↳ Pyridoxal phosphate ↑: ++ dopamine degradation
↓ dopamine

WORSENING OF PD

Independent ambulation with safety measures

SC: apomorphine: D₂ receptor

* on demand therapy for off periods

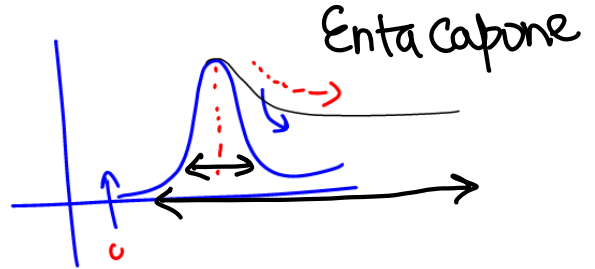
nasal spray
levodopa

Best To reduce off Time: safinamide

New drugs

* istradefylline : off phenomenon episodes ↓

* COMT ⊖ — Catechol-O-methyl
Transferase ⊖ : ⊖ ↓
degradation of
dopamine



* Dopamine agonists

"Neupro" patch

↳ D₂ Receptor : ⊕ : ROTIIGOTINE
Transdermal patch

(nitro patch) : angina : 12 HOUR / 12 HOUR

onset : 30-60 min, duration ↑

no drug in blood : 10 TOLERANCE