Parkinson’s disease Focussed Examination

Note: the instructions may be non-specific e.g. ‘examine this patient with a tremor’, ‘examine this patient’s gait and then proceed’ or ‘examine this patient neurologically’. In this case, approach by asking a few focussed questions (if allowed) or inspecting for tremor/gait abnormalities and then proceed with the relevant focussed examination to elicit all the signs of the condition.

Introduction
- Wash hands, Introduce self, ask Patients name & DOB & what they like to be called, Explain examination and get consent

General Observations
General
- Walking aids etc

Tremor
- Note if obviously visible tremor (if not, ask the patient to close their eyes and count down from 20 to distract them)
  - asymmetrical resting pill rolling tremor (4 - 8 Hz)
  - begins distally (fingers, hands, forearm), can involve chin and mouth
  - reduced with finger to nose testing
  - tremor can be accentuated by patient clenching contralateral hand or counting serial 7’s

Gait and Posture
- Ask them to walk up and down room
  - shuffling gait (reduced stride length precedes)
  - hesitant: difficulty initiating and turning (multiple steps)
  - festinating gait: patient walks faster and faster as to not fall over
  - lack of arm swing (early sign due to increased tone)
  - unsteadiness (propulsion/retropulsion - tendency to fall forward or backwards)
- Observe posture while walking
  - stooped posture

NOW...work down the body

Face

Face
- Observe face
  - “hypomimia” (mask like face): blank and expressionless face with decreased blinking
  - drooling

Eyes
- Glabella tap (Myerson’s sign= blinking fails to cease with continued tapping)

Speech
- Say a sentence about themselves and what they’ve done today or describe the room they are in
  - hypophonia (quiet)
  - soft, faint and hard to understand
  - slow thinking

Focussed Upper Limbs
- Tone (+ augment increased tone by getting patient to distract them self by moving contralateral arm up and down)
  - led pipe = increased tone; cogwheel rigidity = tremor superimposed on increased tone
- Bradykinesia
  - open and close thumb and index finger like snapper as fast as possible (lack of amplitude and slow and not in sync)
  - play imaginary piano (slow)
  - open and close big imaginary doorknob (difficulty pronating and supinating)

Focussed Lower Limbs
- Bradykinesia (heel tap)
  - lack (or decay) of amplitude and slow and not in sync
**Extras**

- **Function**
  - See writing (micrographia)
  - Undo buttons
- **Exclude Parkinson’s plus syndromes**
  - Eye movements: up and down (*progressive supranuclear palsy* = vertical limitation)
  - Eye movements: Side to side (*nystagmus* = multisystem atrophy)

**To complete**

- Thank patient and cover them
- “To complete my exam I would look for...
  - Cerebellar signs (*multisystem atrophy*)
  - Posture blood pressure (*significant drop may be present in multisystem atrophy*)
  - Mini-mental state exam (*Lewy body dementia*)
  - See drug chart (*parkinsonism drugs*)
- Summarise and suggest further investigations you would do after a full history

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**Parkinsonism causes**
- Parkinson’s disease
- Anti-dopaminergic drugs (e.g. anti-psychotics, metoclopramide)
- Parkinson’s plus syndromes
- Wilson’s disease

**Parkinson’s plus syndromes**
- Progressive supranuclear palsy: vertical limitation, axial rigidity
- Multi-system atrophy: cerebellar signs, autonomic problems
- Corticobulbar degeneration

**Parkinson’s disease quadrad**
- Tremor
- Rigidity
- Bradykinesia
- Postural instability