ATTACHMENT C:

UNIFIED PARKINSON'S DISEASE RATING SCALE (UPDRS)

APPEARS THIS WAY
ON ORIGINAL
UNIFIED PARKINSON'S DISEASE RATING SCALE (UPDRS)

I: MENTATION, BEHAVIOR AND MOOD

1. Intellectual impairment:
   0 = None
   1 = Mild; consistent forgetfulness with partial recollection of events and no other difficulties
   2 = Moderate memory loss, with disorientation and moderate difficulty handling complex problems; mild but definite impairment of function at home, with need of occasional prompting
   3 = Severe memory loss with disorientation for time and often to place, severe impairment in handling problems
   4 = Severe memory loss with orientation preserved to person only; unable to make judgments or solve problems; requires much help with personal care; cannot be left alone at all

2. Thought disorder (due to dementia or drug intoxication):
   0 = None
   1 = Vivid dreams
   2 = "Benign" hallucinations with insight retained
   3 = Occasional to frequent hallucinations or delusions; without insight; could interfere with daily activities
   4 = Persistent hallucinations, delusions, or florid psychosis: not able to care for self

3. Depression:
   0 = Not present
   1 = Periods of sadness or guilt greater than normal but never sustained for days or weeks
   2 = Sustained depression (1 week or more)
   3 = Sustained depression with vegetative symptoms (insomnia, anorexia, weight loss, loss of interest)
   4 = Sustained depression with vegetative symptoms and suicidal thoughts or intent

4. Motivation / initiative:
   0 = Normal
   1 = Less assertive than usual; more passive
   2 = Loss of initiative or disinterest in elective (nonroutine) activities
   3 = Loss of initiative or disinterest in day-to-day (routine) activities
   4 = Withdrawn; complete loss of motivation

II: ACTIVITIES IN DAILY LIVING

5. Speech:
   0 = Normal
   1 = Mildly affected; no difficulty being understood
   2 = Moderately affected; sometimes asked to repeat statements
   3 = Severely affected; frequently asked to repeat statements
   4 = Unintelligible most of the time
6. Salivation:
0 = Normal
1 = Slight but definite excess of saliva in mouth; may have night-time drooling
2 = Moderately excessive saliva; may have minimal drooling
3 = Marked excess of saliva; some drooling
4 = Marked drooling; requires constant use of tissue or handkerchief

7. Swallowing:
0 = Normal
1 = Rare choking
2 = Occasional choking
3 = Requires soft food
4 = Requires nasogastric tube or gastrostomy feeding

8. Handwriting:
0 = Normal
1 = Slightly slow or small
2 = Moderately slow or small; all words are legible
3 = Severely affected; not all words are legible
4 = The majority of words are not legible

9. Cutting food and handling utensils:
0 = Normal
1 = Somewhat slow and clumsy, but no help needed
2 = Can cut most foods, although clumsy and slow; some help needed
3 = Food must be cut by someone, but can still feed slowly
4 = Needs to be fed

10. Dressing:
0 = Normal
1 = Somewhat slow, but no help needed
2 = Occasional assistance needed with buttoning, getting arms into sleeves
3 = Considerable help required, but can do some things alone
4 = Helpless

11. Hygiene:
0 = Normal
1 = Somewhat slow, but no help needed
2 = Needs help to shower or bathe, very slow in hygienic care
3 = Requires assistance for washing, brushing teeth, combing hair, going to bathroom
4 = Needs Foley catheter or other mechanical aids

12. Turning in bed and adjusting bedclothes:
0 = Normal
1 = Somewhat slow and clumsy, but no help needed
2 = Can turn alone or adjust sheets, but with great difficulty
3 = Can initiate attempt, but cannot turn or adjust sheets alone
4 = Helpless
13. Falling (unrelated to freezing):
   0 = None
   1 = Rare falling
   2 = Occasionally falls, less than once daily
   3 = Falls an average of once daily
   4 = Falls more than once daily

14. Freezing when walking:
   0 = None
   1 = Rare freezing when walking; may have start hesitation
   2 = Occasional freezing when walking
   3 = Frequent freezing; occasionally falls because of freezing
   4 = Frequently falls because of freezing

15. Walking:
   0 = Normal
   1 = Mild difficulty; may not swing arms or may tend to drag leg
   2 = Moderate difficulty, but requires little or no assistance
   3 = Severe disturbance of walking; requires assistance
   4 = Cannot walk at all, even with assistance

16. Tremor:
   0 = Absent
   1 = Slight and infrequently present
   2 = Moderate; bothersome to patient
   3 = Severe; interferes with many activities
   4 = Marked; interferes with most activities

17. Sensory complaints related to parkinsonism:
   0 = None
   1 = Occasionally has numbness, tingling or mild aching
   2 = Frequently has numbness, tingling or aching; not distressing
   3 = Frequent painful sensations
   4 = Excruciating pain

III: MOTOR EXAMINATION

18. Speech:
   0 = Normal
   1 = Slight loss of expression, diction and/or volume
   2 = Monotone, slurred but understandable; moderately impaired
   3 = Marked impairment, difficult to understand
   4 = Unintelligible
19. Facial expression:
   0 = Normal
   1 = Minimal hypomimia; could be normal "poker face"
   2 = Slight but definitely abnormal diminution of facial expression
   3 = Moderate hypomimia; lips are parted some of the time
   4 = Masked or fixed facies, with severe or complete loss of facial expression; lips parted
      1/4 inch or more

20. Tremor at rest:
   0 = Absent
   1 = Slight and infrequently present
   2 = Mild in amplitude and persistent, or moderate in amplitude but only intermittently
      present
   3 = Moderate in amplitude and present most of the time
   4 = Marked in amplitude and present most of the time

21. Action or postural tremor of hands:
   0 = Absent
   1 = Slight; present with action
   2 = Moderate in amplitude; present with action
   3 = Moderate in amplitude; present with posture-holding as well as with action
   4 = Marked in amplitude; interferes with feeding

22. Rigidity (judged on passive movement of major joints with patient relaxed in sitting
     position; "cogwheeling" to be ignored):
   0 = Absent
   1 = Slight or detectable only when activated by mirror or other movements
   2 = Mild to moderate
   3 = Marked, but full range of motion easily achieved
   4 = Severe; range of motion achieved with difficulty

23. Finger taps (patient taps thumb with index finger in rapid succession with widest amplitude
     possible, each hand separately):
   0 = Normal
   1 = Mild slowing and/or reduction in amplitude
   2 = Moderately impaired; definite and early fatiguing; may have occasional arrests in
      movement
   3 = Severely impaired; frequent hesitation in initiating movements or arrests in ongoing
      movement
   4 = Can barely perform the task

APPEARS THIS WAY
ON ORIGINAL
24. Hand movements (patient opens and closes hands in rapid succession with widest amplitude possible, each hand separately):
   0 = Normal
   1 = Mild slowing and/or reduction in amplitude
   2 = Moderately impaired; definite and early fatiguing; may have occasional arrests in movement
   3 = Severely impaired; frequent hesitation in initiating movements or arrests in ongoing movement
   4 = Can barely perform the task

25. Rapid alternating movements of hand (pronation-supination movements of hands, vertically or horizontally, with as large an amplitude as possible both hands simultaneously):
   0 = Normal
   1 = Mild slowing and/or reduction in amplitude
   2 = Moderately impaired; definite and early fatiguing; may have occasional arrests in movement
   3 = Severely impaired; frequent hesitation in initiating movements or arrests in ongoing movement
   4 = Can barely perform the task

26. Leg agility (patient taps heel on ground in rapid succession, picking up entire leg; amplitude should be about 3 inches):
   0 = Normal
   1 = Mild slowing and/or reduction in amplitude
   2 = Moderately impaired; definite and early fatiguing; may have occasional arrests in movement
   3 = Severely impaired; frequent hesitation in initiating movements or arrests in ongoing movement
   4 = Can barely perform the task

27. Arising from chair (patient attempts to arise from a straight-backed wood or metal chair, with arms folded across chest):
   0 = Normal
   1 = Slow, or may need more than one attempt
   2 = Pushes self up from arms of seat
   3 = Tends to fall back and may have to try more than one time but can get up without help
   4 = Unable to arise without help

28. Posture:
   0 = Normal erect
   1 = Not quite erect, slightly stooped posture; could be normal for older person
   2 = Moderately stooped posture, definitely abnormal; can be slightly leaning to one side
   3 = Severely stooped posture with kyphosis; can be moderately leaning to one side
   4 = Marked flexion, with extreme abnormality of posture
29. Gait:
   0 = Normal
   1 = Walks slowly; may shuffle with short steps, but not festination or propulsion
   2 = Walks with difficulty but requires little or no assistance; may have some festination,
      short steps, or propulsion
   3 = Severe disturbance of gait; requires assistance
   4 = Cannot walk at all, even with assistance

30. Postural stability (response to sudden posterior displacement produced by pull on
shoulders while patient is erect, with eyes open and feet slightly apart; patient is prepared):
   0 = Normal
   1 = Retropulsion, but recovers unaided
   2 = Absence of postural response; would fall if not caught by examiner
   3 = Very unstable; tends to lose balance spontaneously
   4 = Unable to stand without assistance

31. Body bradykinesia and hypokinesia (combining slowness, hesitancy, decreased arm
    swing, small amplitude and poverty of movement in general):
   0 = None
   1 = Minimal slowness, giving movement a deliberate character; could be normal for some
      persons; possibly reduced amplitude
   2 = Mild degree of slowness and poverty of movement that is definitely abnormal;
      alternatively, some reduced amplitude
   3 = Moderate slowness; poverty or small amplitude of movement
   4 = Marked slowness; poverty or small amplitude of movement

IV: COMPLICATIONS OF THERAPY (in the past week)

A. dyskinesias

32. Duration: What proportion of the waking day are dyskinesias present?
    (historical information):
    0 = None
    1 = 1-25 % of day
    2 = 26-50 % of day
    3 = 51-75 % of day
    4 = 76-100 % of day

33. Disability: How disabling are the dyskinesias? (historical information; may be modified by office examination):
    0 = Not disabling
    1 = Mildly disabling
    2 = Moderately disabling
    3 = Severely disabling
    4 = Completely disabling

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34. Painful dyskinesia: How painful are the dyskinesias?
   0 = No painful dyskinesias
   1 = Slightly
   2 = Moderately
   3 = Severely
   4 = Markedly

35. Presence of early morning dystonia (historical information):
   0 = No
   1 = Yes

B. Clinical Fluctuations

36. Are any "off" periods predictable as to timing after a dose of medication?
   0 = No
   1 = Yes

37. Are any "off" periods unpredictable as to timing after a dose of medication?
   0 = No
   1 = Yes

38. Do any "off" periods come on suddenly (e.g., within a few seconds)?
   0 = No
   1 = Yes

39. What proportion of the waking day is the patient "off", on average?
   0 = None
   1 = 1-25 % of day
   2 = 26-50 % of day
   3 = 51-75 % of day
   4 = 76-100 % of day

C. Other Complications

40. Does the patient have anorexia, nausea, or vomiting?
   0 = No
   1 = Yes

41. Does the patient have any sleep disturbances (e.g., insomnia or hypersomnia)?
   0 = No
   1 = Yes

42. Does the patient have symptomatic orthostasis?
   0 = No
   1 = Yes
V: MODIFIED HOEHN AND YAHk STAGING

Stage 0 = No signs of disease
Stage 1 = Unilateral disease
Stage 1.5 = Unilateral plus axial involvement
Stage 2 = Bilateral disease without impairment of balance
Stage 2.5 = Mild bilateral disease with recovery on pull test
Stage 3 = Mild to moderate bilateral disease; some postural instability; physically independent
Stage 4 = Severe disability; still able to walk or stand unassisted
Stage 5 = Wheelchair-bound or bedridden unless aided

VI: SCHWAB AND ENGLAND ACTIVITIES OF DAILY LIVING SCALE

100 % = Completely independent; able to do all chores without slowness, difficulty, or impairment; essentially normal; unaware of any difficulty
90 % = Completely independent; able to do all chores with some degree of slowness, difficulty and impairment; may take twice as long as normal; beginning to be aware of difficulty
80 % = Completely independent in most chores; takes twice as long as normal; conscious of difficulty and slowness
70 % = Not completely independent; more difficulty with some chores; takes three to four times as long as normal in some; must spend a large part of the day with chores
60 % = Some dependency; can do most chores, but exceedingly slowly and with considerable effort and errors; some chores impossible
50 % = More dependent; needs help with half the chores, slower, etc.; difficulty with everything
40 % = Very dependent; can assist with all chores but does few alone
30 % = With effort, now and then does a few chores alone or begins alone; much help needed
20 % = Does nothing alone; can be a slight help with some chores; severe invalid
10 % = Totally dependent and helpless; complete invalid
0 % = Vegetative functions such as swallowing, bladder and bowel functions are not functioning; bedridden

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