

SIMPSON-ANGUS EXTRAPYRAMIDAL SIDE EFFECTS SCALE

The exam should be conducted in a room where the subject can walk a sufficient distance to allow him/her to get into a natural rhythm (e.g. 15 paces). Each side of the body should be examined. If one side shows more pronounced pathology than the other, this score should be noted and this taken. Cogwheel rigidity may be palpated when the examination is carried out for items 3, 4, 5, and 6. It is not rated separately and is merely another way to detect rigidity. It would indicate that a minimum score of 1 would be mandatory.

1. **Gait:** The patient is examined as he walks into the examining room, his gait, the swing of his arms, his general posture, all form the basis for an overall score for this item. This is rated as follows:
 - 0 Normal
 - 1 Diminution in swing while the patient is walking
 - 2 Marked diminution in swing with obvious rigidity in the arm
 - 3 Stiff gait with arms held rigidly before the abdomen
 - 4 Stooped shuffling gait with propulsion and retropulsion

2. **Arm Dropping:** The patient and the examiner both raise their arms to shoulder height and let them fall to their sides. In a normal subject, a stout slap is heard as the arms hit the sides. In the patient with extreme Parkinson's syndrome, the arms fall very slowly:
 - 0 Normal, free fall with loud slap and rebound
 - 1 Fall slowed slightly with less audible contact and little rebound
 - 2 Fall slowed, no rebound
 - 3 Marked slowing, no slap at all
 - 4 Arms fall as though against resistance; as though through glue

3. **Shoulder Shaking:** The subject's arms are bent at a right angle at the elbow and are taken one at a time by the examiner who grasps one hand and also clasps the other around the patient's elbow. The subject's upper arm is pushed to and fro and the humerus is externally rotated. The degree of resistance from normal to extreme rigidity is scored as follows:
 - 0 Normal
 - 1 Slight stiffness and resistance
 - 2 Moderate stiffness and resistance
 - 3 Marked rigidity with difficulty in passive movement
 - 4 Extreme stiffness and rigidity with almost a frozen shoulder

4. **Elbow Rigidity:** The elbow joints are separately bent at right angles and passively extended and flexed, with the subject's biceps observed and simultaneously palpated. The resistance to this procedure is rated. (The presence of cogwheel rigidity is noted separately.)
 - 0 Normal
 - 1 Slight stiffness and resistance
 - 2 Moderate stiffness and resistance
 - 3 Marked rigidity with difficulty in passive movement
 - 4 Extreme stiffness and rigidity with almost a frozen elbow

5. **Wrist Rigidity or Fixation of Position:** The wrist is held in one hand and the fingers held by the examiner's other hand, with the wrist moved to extension, flexion and ulnar and radial deviation:
 - 0 Normal
 - 1 Slight stiffness and resistance
 - 2 Moderate stiffness and resistance
 - 3 Marked rigidity with difficulty in passive movement
 - 4 Extreme stiffness and rigidity with almost frozen wrist

6. **Leg Pendulousness:** The patient sits on a table with his legs hanging down and swinging free. The ankle is grasped by the examiner and raised until the knee is partially extended. It is then allowed to fall. The resistance to falling and the lack of swinging form the basis for the score on this item:
 - 0 The legs swing freely
 - 1 Slight diminution in the swing of the legs
 - 2 Moderate resistance to swing
 - 3 Marked resistance and damping of swing
 - 4 Complete absence of swing

7. **Head Dropping:** The patient lies on a well-padded examining table and his head is raised by the examiner's hand. The hand is then withdrawn and the head allowed to drop. In the normal subject the head will fall upon the table. The movement is delayed in extrapyramidal system disorder, and in extreme parkinsonism it is absent. The neck muscles are rigid and the head does not reach the examining table. Scoring is as follows:
 - 0 The head falls completely with a good thump as it hits the table
 - 1 Slight slowing in fall, mainly noted by lack of slap as head meets the table
 - 2 Moderate slowing in the fall quite noticeable to the eye
 - 3 Head falls stiffly and slowly
 - 4 Head does not reach the examining table

8. **Glabella Tap:** Subject is told to open eyes wide and not to blink. The glabella region is tapped at a steady, rapid speed. The number of times patient blinks in succession is noted:
 - 0 0-5 blinks
 - 1 6-10 blinks
 - 2 11-15 blinks
 - 3 16-20 blinks
 - 4 21 and more blinks

9. **Tremor:** Patient is observed walking into examining room and is then reexamined for this item:
 - 0 Normal
 - 1 Mild finger tremor, obvious to sight and touch
 - 2 Tremor of hand or arm occurring spasmodically
 - 3 Persistent tremor of one or more limbs
 - 4 Whole body tremor

10. **Salivation:** Patient is observed while talking and then asked to open his mouth and elevate his tongue. The following ratings are given:
 - 0 Normal
 - 1 Excess salivation to the extent that pooling takes place if the mouth is open and the tongue raised
 - 2 When excess salivation is present and might occasionally result in difficulty speaking
 - 3 Speaking with difficulty because of excess salivation
 - 4 Frank drooling

Citation: Simpson GM, Angus JWS: A rating scale for extrapyramidal side effects. *Acta Psychiatrica Scandinavica* 212:11-19,1970