Drug Induced Motor Effects Scale (DIMES) ©

A. MOTOR SIDE EFFECTS

Assessment Date (dd/mm/yy)						
Assessment Completed By						
Current Medication(s)						
SCORING: When uncertain about severity (e.g. mild v. moderate), record the higher score	**Score**	**Score**	**Score**	**Score**	**Score**	**Score**
SUBJECTIVE EXPERIENCE (≤ 1 week)						
SCORE: 0 = NONE, 1 = QUESTIONABLE, 2 = MILD, 3 = MODERATE, 4 = SEVERE						
Parkinsonism						
Dyskinesia						
Akathisia						
Dystonia						
PARKINSONISM – Facial Expression						
SCORE: 0 = NONE: no symptoms, **1 = QUESTIONABLE:** unclear if symptom present, **2 = MILD:** mild decrease in facial expressiveness, **3 = MODERATE**: consistently blunted affect, but some expressiveness with engagement, frequent staring gaze, reduced blinking, **4 = SEVERE:** no facial expressiveness, staring gaze, notably reduced blinking						
Facial expression – reduced						
PARKINSONISM – Tremor/Bradykinesia						
SCORE: 0 = NONE: no symptoms, **1 = QUESTIONABLE:** unclear if symptom present, **2 = MILD:** infrequently present and/or small/fine amplitude movements, **3 = MODERATE:** frequently present with moderate amplitude movements, **4 = SEVERE:** continuously present with moderate to large amplitude movements						
Hands – tremor (resting)	*R*	*R*	*R*	*R*	*R*	*R*
	L	*L*	*L*	*L*	*L*	*L*
Hands – tremor (arms extended, fingers apart)	*R*	*R*	*R*	*R*	*R*	*R*
	L	*L*	*L*	*L*	*L*	*L*
Hands – bradykinesia	*R*	*R*	*R*	*R*	*R*	*R*
	L	*L*	*L*	*L*	*L*	*L*
PARKINSONISM – Rigidity						
SCORE: 0 = NONE: no symptoms, **1 = QUESTIONABLE:** unclear if symptom present, **2 = MILD:** some resistance to passive movement, **3 = MODERATE:** moderate resistance to passive movement but easily able to move limb, **4 = SEVERE:** marked resistance to passive movement, difficult to move limb						
Elbow – rigidity	*R*	*R*	*R*	*R*	*R*	*R*
	L	*L*	*L*	*L*	*L*	*L*
PARKINSONISM – Gait						
SCORE: 0 = NONE: no symptoms, **1 = QUESTIONABLE:** unclear if symptom present, **2 = MILD:** mild reduced pendular arm movement, normal step length, **3 = MODERATE:** moderately reduced pendular arm movement, stiff posture, reduced step length, **4 = SEVERE:** no pendular arm movement, markedly reduced step length/shuffling gait, difficulties turning, stooped posture						
Gait – abnormality						
AKATHISIA						
SCORE: 0 = NONE: no symptoms, **1 = QUESTIONABLE:** unclear if symptom present, **2 = MILD:** restless movements of one extremity, some increase in position changes but able to remain seated through duration of encounter, **3 = MODERATE:** frequent movement of one or more extremity, very frequent position changes, may be asking to get up and walk, but able to remain seated through duration of encounter, **4 = SEVERE:** near constant movement of more than one extremity, truncal rocking. Unable to remain seated for the duration of the encounter						
Observed motor restlessness						
DYSTONIA						
SCORE: 0 = NONE: no symptoms, **1 = QUESTIONABLE** - unclear if symptom present, **2 = MILD:** visible muscle contraction which patient can correct with minimal impact on posture. Patient does not appear distressed, **3 = MODERATE:** notable and sustained muscle contraction which patient can correct, but must do so repeatedly, with impact on posture. Patient somewhat distressed, **4 = SEVERE:** notable and sustained muscle contraction which patient is not able to fully correct, with substantial/sustained impact on posture. Patient notably distressed.						
Observed dystonia						
Details – name affected body part (e.g. head, extremities, trunk):						
DYSKINESIA						
SCORE: 0 = NONE: no symptoms, **1 = QUESTIONABLE:** unclear if symptom present, **2 = MILD:** infrequently present movements, which patient can suppress for extended periods of time, **3 = MODERATE:** frequently persisting movements, which patient is only briefly able to suppress, **4 = SEVERE:** continuously present movements, which patient is not able to completely suppress, even for brief periods of time						
Face and mouth – *with activation*						
Tongue – *with activation*						
Upper extremities – arms, hands	*R*	*R*	*R*	*R*	*R*	*R*
	L	*L*	*L*	*L*	*L*	*L*
Trunk – neck, shoulders, hips						
Lower extremities – ankles/toes	*R*	*R*	*R*	*R*	*R*	*R*
	L	*L*	*L*	*L*	*L*	*L*

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WHY MONITOR? Schizophrenia[9, 5] and use of antipsychotics[144, 20, 27, 33, 34, 377] are independently associated with increased motor and metabolic abnormalities, which can contribute to non-adherence to medication, and increased morbidity and mortality[7, 166, 199, 233, 288, 40, 41, 433, 444].
MINIMUM MONITORING FREQUENCY: For newly initiated medication: baseline, 1 (motor side effects only), 3 and 12 months. For persons on the same medication > 1 year: q 12 months.

B. EXAMINATION PROCEDURE

ALL "hands on" aspects of the examination should be done with passive movement of the person's respective body part.

SUBJECTIVE EXPERIENCE	
Screen	Ask the person: "During the last week, have you…" a) noticed any shakes, muscle stiffness, or problems walking? (PARKINSONISM) b) noticed any abnormal body movements? (DYSKINESIA) c) felt restless or had the need to move even when you didn't want to? (AKATHISIA) d) experienced any muscle spasms that lasted at least 1 minute? (DYSTONIA) If yes, explore and record the pertinent details.
PARKINSONISM	*Consists of motor disturbances, which include tremor, impaired gait/posture, postural instability, rigidity, reduced facial expression/speech, and bradykinesis.*
Facial expression - reduced	Observe the person's face for reduced facial expression, decreased blinking or parted lips.
Hands - tremor (resting)	Observe the person's hands for a resting tremor, with the person sitting with their elbows resting on their thighs and their hands hanging over their knees.
Hands - tremor (arms extended, fingers apart)	Observe the person's hands for a tremor, with their palms facing down and arms fully extended with fingers apart.
Hands - bradykinesia	Ask the person to fully open and close their hands, one at a time, in rapid succession, observing for bradykinesia.
Elbow - rigidity	Flex and extend the person's arms, one at a time, with your thumb on their bicep tendon, noting rigidity ("cog-wheel" or "lead pipe").
Gait - abnormality	Observe the person's gait either entering or exiting the room. Note evidence of stooped posture, shuffling gait, decreased arm swing or bradykinesia.
AKATHISIA	*Consists of subjective feelings of inner restlessness with the urge to move, and/or objective movements such as restless movement of one extremity, changing position, rocking while standing or sitting, lifting feet as if marching on the spot, and inability to sit down for long periods with pacing back and forth.*
Observed motor restlessness - lower limbs	The person should be observed (while seated) for a minimum of 5 minutes. A "severe" score should be reserved for persons who are unable to remain seated for the entire 5-minute time period, due to akathisia.
DYSTONIA	*Characterized by muscles which are contracted, contorted and often painful, sometimes accompanied by repetitive jerking or twisting movements, resulting in the person's assuming abnormal postures.*
Observed dystonia - head, upper and lower extremities, trunk	The person's entire head, neck, limbs and trunk should be observed while sitting or standing. The details of observed dystonias should be recorded.
DYSKINESIA	*Characterized by movements that are repetitive, purposeless, and involuntary.*
Muscles of face and mouth - *with activation*	While engaging the person in an activation activity (e.g. finger tapping), observe the person's face and mouth, noting any frowning, blinking, grimacing, puckering, repetitive opening and closing of the mouth, clenching of the jaw or lateral movements of the jaw.
Tongue - *with activation*	While engaging the person in an activation activity (e.g. finger tapping), with the person's mouth open, observe for in and out or lateral movements of the tongue.
Upper extremities - arms, hands Trunk - neck, shoulders, hips Lower extremities – ankles/toes	While the person is sitting in a chair, face the patient to observe for evidence of dyskinesias of the: a) Arms and hands. Do NOT include tremor. b) Ankles and/or toes (including inversion/eversion of the foot). c) Neck, shoulders, hips (including rocking, twisting, squirming).

B. ISSUE/ACTION/OUTCOME

DATE	ISSUE	ACTION	OUTCOME

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