

Tardive Dyskinesia "Screen Time":

Best Screening Practices in Person,

Over Video, or via Telephone

FACULTY



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All Patients Receiving Dopamine Receptor Blocking Agents Should Be Screened for TD

TD is associated with prolonged use of DRBAs, including available antipsychotics, used to treat a variety of psychiatric disorders such as schizophrenia,⁵ bipolar disorder,⁵ and major depressive disorder (as adjunctive treatment),⁵ among others. With expanded indications as well as varied off-label DRBA use, the number of people at risk for TD continues to increase.⁶

In a 2020 consensus statement published by Caroff and colleagues, a panel of experts specializing in psychiatry and neurology unanimously agreed that all patients receiving DRBAs should be screened for TD.⁶ In fact, it is recommended that clinicians assess all patients who have been prescribed antipsychotics for the development of TD and other associated movement disorders at every clinical encounter (live or remote), regardless of the degree of TD risk.⁶

The American Psychiatric Association (APA) is in agreement with this consensus statement and clarifies the utility of a structured clinical exam in their latest practice guideline for the treatment of patients with schizophrenia. According to the APA, for patients displaying any abnormal movements, a structured clinical exam using an instrument such as the Abnormal Involuntary Movement Scale (AIMS) should be conducted at least once a year and at least every 6 months in higher-risk patients.⁷

"For patients who have been taking antipsychotics, I feel that TD can be a ticking time bomb," noted Ms Matthews. "It can show up at any time and should be screened at each visit."

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This newsletter was sponsored and co-developed by Neurocrine Biosciences. The faculty have been compensated by Neurocrine Biosciences. This newsletter is intended to provide general information about tardive dyskinesia and not medical advice for any particular patient. "I find that many patients may not spontaneously report TD movements," adds Dr Isaacson. "Therefore, spending a short time at each clinical encounter to look at the patient for any movements is a good clinical practice."

Multiple Movement Manifestations of TD¹

TD refers to involuntary abnormal movements that emerge in patients who have been taking antipsychotics for a while. The classical oro-buccal-lingual movements are often accompanied by choreic-like movements in other body parts. The typical presentation is a combination of tongue twisting and protrusion, lip smacking and puckering, and chewing movements. TD may affect the limbs, which manifests as "piano-playing" fingers, grasping, flexion and extension of limbs, and foot tapping. Involvement of diaphragm and respiratory muscles may result in loud breathing, hyperventilation, grunting, groaning, or distorted speech. This latter type of movements can present with or without involvement of the lower face, including the mouth and tongue.

"One of the keys to the successful treatment of TD is accurate diagnosis," says Dr Kremens. "Routine screening is critical to identify and address TD early. It is therefore crucial for all patients on DRBAs to undergo routine screening for TD."6,7

As detailed in another newsletter in this series, "360-Degree Impact of Tardive Dyskinesia: Functional, Emotional, and Social Consequences," TD can have significant adverse effects on quality of life and mental well-being. Although patients may have mild, moderate, or severe symptoms, the same movement severity can be associated with varying impact on different patients.7

TD can be very socially isolating.8 "In my experience, patients with abnormal movements may be shunned or avoided by others; their social interactions may be limited as a result of their abnormal movements, especially those that involve the face, mouth, and tongue," says Dr Kremens.

Structured Clinical Scales for TD Screening Are Straightforward, Quick to Perform

The APA recommends using a structured clinical exam at least once a year and at least every 6 months in patients at greater risk for TD.7 One such tool is the AIMS, a 12-item, clinician-rated scale used to assess symptom severity in patients with TD (Figure).⁹ The AIMS takes about 5 minutes to complete and scores patients on a scale from 0 (none) to 4 (severe) on various symptoms: facial and oral movements, extremity movements, trunk movements, and global judgments related to severity, incapacitation,

and patient awareness of these movements.⁹ Additional items, which are related to dental status and sleep, are scored as 0 (no) or 1 (yes).⁹ Experts agree that no specific score threshold suggests the need for intervention; instead, clinicians should consider the impact of the TD movements on the individual patient.7 Even one rating of mild movements (ie, ≥2 on AIMS) could represent TD that may be amenable to treatment.⁶

Facial and Oral Movements*	None	Minimal	Mild	Moderate	Severe
1. Muscles of facial expression	0	1	2	3	4
2. Lips and perioral area	0	1	2	3	4
3. Jaw	0	1	2	3	4
4. Tongue	0	1	2	3	4
Extremity Movements	None	Minimal	Mild	Moderate	Severe
5. Upper (arms, wrists, hands, fingers)	0	1	2	3	4
6. Lower (legs, knees, ankles, toes)	0	1	2	3	4
Trunk Movements	None	Minimal	Mild	Moderate	Severe
7. Neck, shoulders, hips	0	1	2	3	4
Global Judgment ^a	None	Minimal	Mild	Moderate	Severe
8. Severity of abnormal movements overall	0	1	2	3	4
9. Incapacitation due to abnormal movements	0	1	2	3	4
10. Patient's awareness of abnormal movements	0	1	2	3	4

Figure. Assessing TD Using the AIMS[®]

AIMS Total Dyskinesia Score = Sum of items (body regions) 1 through 7

AIMS is a clinician-rated scale used to assess TD severity

· Items 11 through 14 (not shown here) reflect assessment of dental status and sleep

[•]Based on the highest single score on the above items.

AIMS, Abnormal Involuntary Movement Scale. Based on: Guy W. ECDEU Assessment Manual for Psychopharmacology. US Department of Health, Education, and Welfare, Public Health Service, Alcohol, Drug Abuse, and Mental Health Administration, National Institute of Mental Health, Psychopharmacology Research Branch, Division of Extramural Research Programs; 1976.

Another structural screening tool is the Dyskinesia Identification System: Condensed User Scale (DISCUS).^{10,11} Clinicians rate 15 behaviors and movements on a scale from 0 to 4, and track scoring over time.¹⁰ A DISCUS total score of \geq 5 should prompt clinicians to look further into a particular case, and the clinician must remain alert for movements that deviate from baseline levels.¹¹

Although these structured scales play a key role in effective screening, clinicians must dig deeper during evaluations to perform comprehensive TD screening. Specifically, they should ask follow-up questions regarding functional impairments attributable to TD—that is, interference with daily activities such as eating, drinking, speaking, breathing, dressing oneself, writing, working, leisure activities, and socializing.¹² In fact, the 2020 APA guideline notes that approved treatment can be considered for patients with mild TD based on factors such as patient preference, associated impairment, or effects on psychosocial functioning.⁷ "Whenever I encounter a patient on an antipsychotic, I always want to do two main things: one, ask whether the tongue or other parts of the body move spontaneously; and two, look at their face, mouth, trunk, arms, and legs while the patient is counting backwards from 20 (called the 'activation maneuver¹²)," advises Dr Isaacson.

"I would also encourage clinicians to ask specific questions regarding the functional impact of TD. In my experience, the patient may not realize it is their TD that is causing their difficulties with function. They may simply assume they are clumsy or less coordinated for other reasons. They may not appreciate that their movements are a result of their medications and are a treatable condition," says Dr Kremens.

"I want to find how patients feel about their movements," adds Ms Matthews. "I had a patient with an AIMS of 3, but her increased rate of blinking was extremely embarrassing as coworkers commented on it at work and she had customers make comments that she needed glasses. Ultimately, this added to her worsening social anxiety," she describes, noting that clinicians have to dig deeper.

The MIND-TD Questionnaire can help facilitate a dialogue about abnormal movements with patients at risk for TD. The questionnaire was developed by clinical experts in psychiatry and movement disorder neurology.

The 4 "MIND" questions can be asked by the treating clinician or a medical staff member at every visit, including audio-only telehealth interactions. The full questionnaire is available at www.MIND-TD.com.

M	Movement Do you have extra or unwanted movements in your body?	🗆 yes	🗆 no
0	Impact Do you feel embarrassed or self-conscious about movements in your body?	🗆 yes	🗆 no
N	Notice Has someone else seen extra movements in your body?	🗆 yes	🗆 no
D	Daily Activities Do any movements cause problems during your daily routine?	🗆 yes	🗆 no

Screening Can (and Should) Be Done in the Telehealth Setting

The COVID-19 pandemic has resulted in a shift from in-person visits to telemedicine.¹³ Federal and state guidelines request that health care facilities limit in-person contact whenever possible.¹⁴ As a result, patient visits are being conducted in a variety of settings. A combination of telehealth (ie, video and/or audio) and in-person visits can be adopted, with periodic in-office movement scale assessments and subsequent telehealth visits serving as follow-up.¹⁵ It is important to treat each telehealth visit with as much detail as one would an in-person visit, including sending appointment reminders, if possible.¹⁶



BEST PRACTICES FOR VIDEO VISITS

If the patient is at home, TD can be assessed reliably via video by following American Academy of Neurology guidance for best practices.¹⁷ These guidelines include ensuring that the patient and caregiver are in a well-lit location and can speak freely.¹⁷

"Some of these instructions may be relayed to the patient prior to the visit by a nurse or medical assistant," advises Ms Matthews. She, Dr Kremens, and Dr Isaacson share additional tips for successful video and telephone screenings in the boxed inset, **Setting Up for Success**.



Click here for illustrative videos of patients with involuntary movements from The MIND-TD Faculty.

Setting Up for Success: Suggestions From Experts



- Have the patient join the appointment via a high-speed internet connection, and avoid using cell phone data for video connections. Test microphone and volume beforehand
- Adequate lighting is key; you will be more likely to catch subtle or infrequent movements. Ask the patient to use a light overhead and avoid backlighting
- The patient should place the device on a stable surface to ensure a clear image, and should use portrait mode for optimal viewing
- The device should be pointed directly at the patient
- If possible, a third party, such as a care partner, can help with the assessment—moving the camera as needed
- For the first part of the exam, start by observing the patient's face close up; then have the patient place their device about 2 to 3 feet (arm's length) away from their body, focused on the face and trunk
- For the second part of the exam, the camera should be 6 feet away so that their hands and feet are visible; observe for jerking fidgety irregular movements in the fingers, hands, feet, or toes
- Observe the patient's face, mouth, trunk, arms, and legs while the patient is counting backwards from 20 (called the "activation maneuver")
- For the third part (if safe and there is sufficient space in the patient's location), have the patient walk in an open space to assess gait and posture



TELEPHONE

- Ask patients about abnormal involuntary movements in plain, simple language
- Do you experience twitching movements?
- How about teeth grinding?
- Do you feel shaky or jerky?
- · Start from the head and work down to the toes
- Ask patients if others have noticed or mentioned any movements to them
- If the patient does not recognize movements, you may need to ask a care partner, significant other, or other person close to the patient
- Any red flags may initiate the need for further workup via video or face-to-face visit
 - Stuart Isaacson, MD; Daniel E. Kremens, MD, JD, FAAN; and Desiree M. Matthews, PMHNP-BC



BEST PRACTICES VIA TELEPHONE

Some patients may not have access to or the ability to use the equipment necessary to conduct a video visit.¹⁴ An audio-only encounter can be a way to start the conversation around any abnormal movements that might be related to TD. The impact of TD on quality of life and well-being can certainly be described over the telephone. Ask patients questions like, "Do you have any functioning difficulties with regard to daily activities?" and "Do you experience any emotional difficulties related to movements, such as embarrassment, avoiding others, or feelings of isolation?"¹⁸

"Ask patients about other symptoms such as physical pain," adds Dr Kremens. "Are they biting the inside of their mouth or clenching their teeth?"

"We can also ask the patient to have someone take a video of their face, trunk, arms, and legs, and then send the video to review," Dr Isaacson suggests.

Before ending your telehealth session, be sure to collect patient feedback and to schedule any necessary follow-up care.¹⁷

Conclusions

An estimated 600,000 people in the United States have TD, and that number is expected to increase with the expanding use of DRBAs for various conditions. Experts agree that all patients who have been prescribed DRBAs should be screened for TD at every clinical encounter, regardless of the degree of risk of TD. The MIND-TD Questionnaire has been developed by clinical experts and is an excellent way to start the conversation about TD with your patients and

their caregivers. Structural screening tools, such as the AIMS, are straightforward and can be used in both in-person and telehealth settings. These assessment tools should be complemented with investigative questions about daily function, social and emotional impact, and overall wellbeing in order to improve screening accuracy—no matter what the clinical setting.

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