Tardive Dyskinesia

Background Information:

1. The likelihood of involuntary movement disorder emerging from the results of treatment with antipsychotic medications is of serious concern for the general health of the citizens of New Mexico.

2. Tardive dyskinesia (TD) is defined as a neurological syndrome caused by long-term use of antipsychotic or neuroleptic medications. It is characterized by repetitive, involuntary, purposeless movements. Facial features include grimacing, tongue protrusion, lip smacking, puckering and pursing, and rapid eye blinking. Whole body symptoms include rapid writhing and jerking movements in the arms or legs and trunk, which can even lead a person off balance. Involuntary movements of the fingers may mimic playing an invisible piano or guitar.

3. The yearly risk for developing TD is 5% if a person is taking traditional antipsychotic medications. Estimates range from 25% to 60% for lifetime risk after taking these medications for longer than three months. The risk is estimated to be higher for people who do not have psychotic disorders.

4. Medications that have anti-dopamine action, such as metachlopramide (Reglan) may cause TD in the absence of any psychiatric illness.

5. TD does not result from most psychotropic medications. It is thought to result from antidopamine receptor action of medications.

6. People with neurological or degenerative conditions of the central nervous system are at increased risk for developing TD, but not guaranteed to develop the symptoms.

7. Spontaneous dyskinesia may arise in people as they become elderly, most likely as a result of degeneration in dopamine containing cells in the brain.

8. Symptoms of TD are worsened by lowering the dosage of antipsychotic medication (withdrawal dyskinesia) and may resolve spontaneously over 3 to 6 months.

9. Symptoms of TD may be masked by increasing the dose of antipsychotic medication.

10. The atypical antipsychotic medications have a reduced risk for inducing TD, but it is not zero.

11. There is no known treatment for TD, nor no known preventive measure. Vitamin E may reduce the severity of symptoms if prescribed within the first 5 years of symptoms.

12. TD symptoms wax and wane in severity; they increase with anxiety or lack of sleep and decrease with relaxation (including disappearing in sleep and under anesthesia).

13. Other causes of voluntary and involuntary movement disorder should be considered and excluded prior to the diagnosis of TD.

Policy Recommendations for I/DD

1. Screening should be done similarly to the general population.

2. Screening should provide meaningful information relevant to clinical concerns.
3. Involuntary movement screening should occur with significant change in type of medication, major change in dose, initiation of treatment or termination of treatment: baseline, at 1-2 months for acute changes, at six months, and then annually, or as directed by the healthcare provider supervising the prescription (physician, nurse practitioner, nurse, etc.).

4. While physicians, physician assistants, nurse practitioners, and selected psychologists are licensed to prescribe antipsychotic medications, it is the scope of standard nursing practice to evaluate for behavioral and medical changes in their patients and this information should be provided to the supervising health care provider at appropriate intervals.

5. Standardized measurement tools include AIMS (Abnormal Involuntary Movement Scale), SIMAS (Sonoma Involuntary Movement Assessment Scale), and DISCUS (Dyskinesia Intensity.) DIS-Co (Dyskinesia Intensity Screening - Coldwater).
   a. Any routine method for examining the whole body at rest and while performing non-arduous movement (e.g. finger-tapping) for involuntary movements and muscle tone that is recorded in a comprehensive format is acceptable.
   b. The Movement Disorder Checklist, Hillside Akathisia Scale, Barnes Akathisia Scale are scales designed to monitor stereotyped movements and restlessness.

6. For patients with established movement disorder or impairment (e.g. cerebral palsy, tremor, spastic hemiplegia, Huntington's disease) the AIMS and DISCUS will provide little to no useful monitoring. The SIMAS and DIS-Co because they do not require "active" participation by the subject, and because they permit observational rating of tremor, lack of movement as well as increased movements are more appropriately used.

7. Screening should be used as a guide for monitoring the well-being of a person with I/DD. It does not prevent TD, predict TD, or affect the efficacy of the pharmacological treatment.

8. Other clinical concerns may over-ride the scheduled monitoring for TD at times, and should be noted in the record, signed by the physician or medical provider of record (examples include nurse practitioner, physician assistant, nurse).

---

**Alya's Vocabulary List**

**Neuroleptic**: Medication used to treat psychotic conditions when a calming effect is desired.

**Dopamine**: A monoamine neurotransmitter formed in the brain and essential for the normal functioning of the central nervous system; as a drug (trade names Dopastat and Intropin), it is used to treat shock and hypotension.

**Metachlopramide (Reglan)**: A potent dopamine antagonist that enters the central nervous system. It is used as an antiemetic (to prevent vomiting) and as a prokinetic (an aid) for gastric emptying in patients with poor muscle emptying of the stomach. The most common side effects are somnolence, (sleepiness), nervousness, and dystonic (prolonged involuntary muscle spasms).

**Spastic Hemiplegic**: Weakness on one side of the body (Hemiplegia) caused by increased tone of muscles (spastic).