How to Effectively Administer a DISCUS or AIMS Exam

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10:45am
OBJECTIVES

› Learn the symptoms, causes and assessments for Tardive Dyskinesia
› Learn how to perform the DISCUS and AIMS tests for Tardive Dyskinesia
› Discuss Neuroleptic Malignant Syndrome
Tardive Dyskinesia

› Tardive means delayed
› Dyskinesia means abnormal movements

What is Tardive Dyskinesia

› This is a disorder that results in involuntary, repetitive body movements
› 60-70% of all cases of Tardive Dyskinesia are mild
› 3% are extremely severe
› Serious side effect of medications that block dopamine called “neuroleptics”
› Dopamine helps cells talk to each other and makes muscles move smoothly.

RISK FACTORS FOR TARDIVE DYSKINESIA

› Being elderly
› Female
› Post Menopausal
› Fetal Alcohol Syndrome
› Diabetes
› Smoking
› Affects African Americans and Asian populations
› Family history of TD
› Intellectual Disability
SYMPTOMS

> Tongue thrusting
> Lip smacking
> Lip pursing
> Grimacing
> Chewing movements
> Rocking of the trunk
> Pelvic thrusting
> Rotating the ankles and legs
> Marching in place

SYMPTOMS CONTINUED

> Irregular breathing
> Frequent humming or grunting
> Excessive eye blinking
> Tonic tongue
> Athetoid tongue
> Tongue tremor
> Torticollis
> Retrocollis

SYMPTOMS CONTINUED

> Shoulder torsion
> Hip torsion
> Pill rolling
> Foot tapping
> Ankle flexion
> Toe movements
> Tics
TREATMENT OF TARDIVE DYSKINESIA

- No treatment consistently works
- Primary aim is reduce symptoms
- Lower dose of causative medication
- Frequent assessment for TD
- Some medications have been tried but these have significant side effects such as Parkinsonian symptoms
- Some physicians have tried Botox injections for facial distortions
- Melatonin and Vitamin B complex medications have shown some promise

MEDICATIONS THAT CAN CAUSE MOVEMENT DISORDERS

- Acetophenazine (Tindal)
- Chlorpromazine (Thorazine, Megaphen, Largactil)
- Chlorprothixene (Taractan)
- Fluphenazine (Prolixin, Permitil)
- Haloperidol (Haldol)
- Loxapine (Loxitane)
- Mesoridazine (Serentil)
- Metoclopramide (Reglan)

MEDICATIONS CONTINUED

- Molindone (Moban)
- Olanzapine (Zyprexa)
- Perphenazine (Etrafon, Trilafon, Triavil)
- Pimozide (Orap)
- Pipercetazine (Quide)
- Prochlorperazine (Combid, Compazine)
- Risperidone (Risperdal)
- Thiethylperazine (Torecan)
MEDICATIONS CONTINUED

- Thioridazine (Mellaril)
- Thiothixene (Navane)
- Trazodone (Desyrel)
- Trifluoperazine (Stelazine)
- Triflupromazine (Vesprin)
- Trimeprazine (Temaril)

PREVENTION OF TARDIVE DYSKINESIA

- Start the medications at the lowest dose possible
- Do a baseline assessment for TD
- Repeat after 1 month on medication
- Repeat every 6 months thereafter
- Repeat 1 month after the medication is discontinued
- If symptoms still present after medication is discontinued for 1 month, repeat assessment at 2 and 3 months.

TESTING FOR TARDIVE DYSKINESIA

- There are 2 easy to use tests for TD
  - AIMS (Abnormal Involuntary Movement Scale)
  - DISCUS (Dyskinesia Identification System-Condensed User Scale)
- There are several other tests that can be done by a behavioral specialist or physician
DISCUS EXAM

- Enter current list of any of the medications that can cause TD
- Enter any pre-existing conditions
  - Cerebral palsy
  - Down's Syndrome
  - Encephalitis
  - Fahr's Syndrome
  - Huntington's
  - Hyperthyroidism
  - Hypoglycemia
  - Parkinson's disease
  - Tourette's Syndrome
- Are examples of a few pre-existing conditions

DISCUS EXAM CONTINUED

- Exam type - baseline, annual, etc
- How much cooperation the individual provided
- Exam Date

HOW TO DO THE EXAM

- Have the person sit in a chair facing you
- Tell the person you will be looking at them for a few minutes without speaking
- Look at the face for tics or grimaces
- Look at the eyes for rapid blinking or bursts of blinking
- Look at the mouth for any chewing motions, lip smacking
- Look at the mouth for any puckering, sucking, or thrusting the lower lip
HOW TO DO THE EXAM CONTINUED
› Have the person open their mouth and look for the tongue to be thrusting side to side-10 seconds
› Have the person stick out their tongue and look for tremors of the tongue, or tongue curling or other involuntary movements of the tongue-10 seconds
› Look for grinding of the teeth
› Look for jaw clenching
› Have the person turn their head from side to side
› Have the person shrug their shoulders

HOW TO DO THE EXAM CONTINUED
› Have the person raise their arms to eye level. Check for tremors and involuntary movements of the fingers and wrists- 10 seconds
› Have the person put their hands in their lap and look for pill rolling movements
› Have the person remove their shoes and socks. Look for involuntary toe movements
› Look for foot tapping movements- 10 seconds
› Put the person’s shoes and socks back on
› Ask the person if they feel restless and if they feel they need to move all the time.
› Look at their breathing- 10 seconds

HOW TO SCORE THE EXAM
› 0-not present, not observed
› 1-Minimal-movements are difficult to detect and only occur once or twice during exam
› 2-Mild-movements occur infrequently and are easy to detect
› 3-Moderate-movements occur frequently and are easy to detect
› 4-Severe-movements occur almost continually
› NA-not assessed as resident can’t cooperate
SCORING INTENSITY
› A score of 5 or above indicates tardive dyskinesia
› A change in score from baseline to a 3-5 indicates tardive dyskinesia
› A score of 2 on two items located in different body areas may indicate Tardive Dyskinesia.

WHAT DO YOU DO WITH THE RESULTS
› Sign the form as “rater”
› Indicate the next testing date
› The physician fills out the Evaluation area of the score sheet
› Fax or send to the physician who is prescribing the medication thought to cause the symptoms
  – In some cases the primary physician may not be the prescriber of the antipsychotic medication and won’t make any changes to the medication and may prescribe other medications.
  – DISCUS form becomes part of the chart with physician signature

HINTS FOR BEFORE AND DURING THE TESTING
› Check the mouth for food or gum
› Model the exam steps for the person
› Never skip a step if the person is able to perform the step
› Provide privacy for the testing
› Take your time, typical exam time is 10-15 minutes
› Do not assess the feet first, work your way down the body
› If the person gets upset during the testing, stop for a period and then return to that step
AIMS TESTING

› Ask the person if there is anything in their mouth
› Ask the person about the condition of their teeth
› Ask the person if they notice any movements of the mouth, face, hands or feet.
› Have the person sit in a chair without arms
› Have the person put their hands on their knees with the legs slightly apart and feet flat on the floor
› Look at the entire body in this position
› Ask the person to sit with hands hanging unsupported and observe for abnormal movements

AIMS TEST CONTINUED

› Ask the person to open their mouth
› Observe the tongue at rest within the mouth and repeat 2 times
› Ask the person to stick out their tongue
› Observe for any tremors or abnormalities and repeat 2 times
› Ask the person to tap thumb with each finger as rapidly as possible for 10 to 15 seconds and then switch to other hand and repeat.
› Observe for facial and leg movements

AIMS TEST CONTINUED

› Flex and extend the person’s left and right arms one at a time
› Observe for tremors
› Ask the person to stand up
› Observe the whole body for any abnormal movements
› Ask the person to extend both arms in front with palms down
› Observe trunk, legs and mouth
› Ask the person to take a few steps, turn and walk back
› Observe hands and gait. Repeat 2 times
SCORING THE AIMS TEST

- 0 - none noticed
- 1 - Minimal – happens rarely
- 2 - Mild – noticeable but infrequent
- 3 - Moderate – noticeable and happens often
- 4 - Severe – happens continuously

WHAT TO DO WITH THE RESULTS OF THE AIMS TEST

- The higher the total score the more likely the person has Tardive Dyskinesia
- Fax or send score sheet to the physician who prescribed the medication that can cause TD.
- Chart results in chart

DIFFERENCES IN DISCUS AND AIMS

- Most physicians are familiar with the DISCUS exam
- DISCUS exam is more intense than AIMS
- DISCUS exam is more predictive of TD
NEUROLEPTIC MALIGNANT SYNDROME

- This is a rare reaction to antipsychotic medications
- It affects the nervous system
- It is treatable
- Most people make a full recovery if diagnosed early
- Can be caused by any antipsychotic medication
- Most commonly caused by Fluphenazine and Haloperidol
- In rare cases can be caused by Compazine, Reglan and like medications

NEUROLEPTIC MALIGNANT SYNDROME

- Incidence - 0.01-0.02% of persons taking neuroleptic medications
- Onset - usually within 30 days
- Risk factors
  - Higher dose of medication
  - IV administration
  - Faster titration of doses
  - Agitation
  - Restraints
  - Dehydration
  - No previous exposure to antipsychotic medication

SYMPTOMS OF NEUROLEPTIC MALIGNANT SYNDROME

- Hyperthermia and sweating
- Muscle rigidity
- Mental status changes-agitated delirium
- Elevated Creatine kinase levels
- Unresponsiveness
- Decreased reflex responses
- Tachycardia, arrhythmias, labile hypertension
SYMPTOMS CONTINUED

› Seizures
› Kidney failure
› Can be life threatening

TREATMENT

› Stop the causative medication
› Initiate rapid cooling
› Usually transferred to ICU
› Tranquillizing medications such as Diazepam may be used

QUESTIONS