Tic Disorders in Youth

What is a Tic?

Motor
- Simple
- Complex

Phonic
- Simple
- Complex
**Motor Tics**

**Simple - sudden brief, meaningless movements**
- Eye blinking, eye movements, grimace, mouth movements, head jerks, shoulder shrugs

**Complex - slower, longer, more “purposeful”**
- Multiple simple tics occurring in an orchestrated pattern, facial gestures, touching objects or self, hand gestures, gyrating or bending, dystonic postures, copropraxia (obscene gestures)

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**Phonic Tics**

**Simple - sudden meaningless sounds or noises**
- Throat clearing, coughing, sniffing, spitting, animal noises, grunting, hissing, sucking, other simple sounds

**Complex - sudden, more “meaningful” utterances**
- Syllables, words, phrases (“shut up”, “stop that”)
- Coprolalia (obscene, aggressive words)
- Palilalia (echo self)
- Echolalia (echo others)
Types of Tic Disorders

Transient Tic Disorder
Tics occurring longer than four weeks but less than one year

Chronic Motor / Vocal Tic Disorder
Motor or vocal tics (not both) occurring for longer than one year

Tourette’s Disorder

Tourette’s Disorder

DSM-IV-TR diagnosis requires:
- Presence of both motor and phonic tics
- Prevalence greater than one year
- Occurrence of tics multiple times per day
- Onset before age 18
- No tic-free period longer than three months

Effects approximately 0.04-0.05% of people
120-150,000 individuals in United States
Tourette’s Disorder

Typical age of onset is 5-6 years old
  Often starts with simple facial tics, then
  progresses to more complex and motor tics

Many more males than females diagnosed
  2-5:1 ratio seen in clinics and epidemiological
  studies

Associated with very high levels of comorbid
  disorders and symptoms

Tic Frequency

97.7% Simple motor tics
  43.2% Eyes
  43.2% Mouth
  34.1% Facial

75.0% Simple vocal tics

13.6% Coprolalia
**Tourette’s & Comorbidity**

- Obsessions and compulsions – 50%
- Depression – 41%
- Attentional problems, hyperactivity – 50-75%
- Learning disabilities – 51%
- Panic attacks – 13%

**Etiology**

- Very strong genetic basis
  - Twin studies show 86% concordance for MZ
  - Family members 150 times more likely to have tics than general population
- Associated perinatal and postnatal insults
  - Low birth weight, maternal stress, chemical exposure, placental insufficiency, gestational diabetes
What Causes Tics?

Appears to be an irregularity of the neurotransmitters dopamine and serotonin

There is no “cure,” but symptoms tend to decrease after adolescence in most people

Treatment options include drugs and therapy

Anticonvulsants and neuroleptics are useful for some, but have very negative side effects

Can’t They Control It?

Short answer: No

Control and severity waxes and wanes over the day

Best analogy for most people is a sneeze

You can feel it coming on, can hold it off for a little while, but ultimately you have to let it out

The longer most people hold it in, the greater the severity when it is let out
**How a Tic Happens**

- Sensory event or premonitory urge
- State of inner conflict over if and when to yield to urge
- Motor or Phonic Production
- Transient relief sensation

**Tourette’s Related Problems**

- Lowered overall quality of life
- Academic problems
- Impaired social interactions
- Number of home-life impairments
  - Increased marital difficulties, substance abuse, family conflict, and parenting frustration
Tourette’s Related Problems

88% of those with tics report a negative impact on their daily functioning

Higher unemployment rates and lowered income as adults

Self-esteem and social anxiety

Physical damage

Common Triggers for Tics

Being upset or anxious
Watching TV
Being alone
Social gatherings
Stressful life events
Hearing others cough
Talking about tics
IN THEIR OWN WORDS

WHAT DO I DO IN THE CLASSROOM?

Educate yourself and your students about what tics are and what they are not

This will help minimize stigmatization

Some students benefit from a “time out for tics” at regular intervals

Allows the student to “let out” tics without disrupting the classroom
WHAT DO I DO IN THE CLASSROOM?

Do not express frustration, anger, or dismay
   This will actually lead to an increase in stress,
   which will in turn cause an increase in tics

Children with Tourette’s tend to perform best
in a calm, supportive environment

As a teacher, you are the model for how your
students will react to tics, so it’s important to
model proper behavior and responses

QUESTIONS?