

# **Uses of Antipsychotic medications and involuntary movements are there increased risks for people with TBI or I/DD?**

**3-05-13**

A.M.B.E.R. clinic  
Albuquerque Multidisciplinary Behavioral Evaluation for Recovery and Resiliency

**Alya Reeve, MD, MPH**  
**University Of New Mexico Health Sciences Center**  
**Professor of Psychiatry, Neurology & Pediatrics**  
**PI, Continuum of Care**

# Overview

- **Common indications for use**
- **Development of medications**
- **Involuntary movement**
  - **classification**
  - **assessment**

# Indications for Antipsychotics

- **Psychosis**
  - **Schizophrenia**
    - loss of reality testing
    - cognitive & sensory distortions
    - chronic; acute
  - **Mixed states**
    - ongoing (Schizoaffective)
    - secondary (e.g. Depression, BPD)
  - **Deprivation states**

# Indication for Antipsychotics?

- **Violence**
  - Repeated
  - Interpersonal
- **Delusions**
  - Fixed ideation
- **Agitation**
  - Goal directed? Disruptive?
- **Dementia**
- **Drug-induced mixed state**

# Indications for Antipsychotics

- **Involuntary movements**
  - **suppress/mask**
  - **senile dyskinesias**
- **HD**
- **Methamphetamine, “dirty” drugs**

# Drug development

- **Anti-dopamine**
  - meso-limbic - - frontal circuitry
- **Animal models**
  - test tail holding
  - mouse balance
- **Potency** (*haldol* → → *thorazine*)
  - lower dose – high motor control
  - higher dose – less rigidity

# Antipsychotics

- **Typical**
  - Haloperidol
  - Thiothixene
  - Chlorpromazine
- **Atypical**
  - Clozapine
  - All the rest

## Mental work

- **Rarely does a person with I/DD or TBI follow a predictable pattern**
- **Creating an individualized empirical dataset of responses**
- **Build a partnership with the patient/care team**

# Clinical concerns

- **Sedation** -- usually short term effect
- **Involuntary movements**
  - acute; chronic
- **NMS**
  - high as a kite, dry as a bone
  - masked in ICU setting
- **Metabolic Syndrome**
  - Weight gain; secondary conditions
  - Lipid profile

# Involuntary Movements

- **Akathisia**
  - **Internal restlessness**
  - **Constant movement**
  - **Acute or chronic**
  - **Tx: often ineffective**
    - **beta-blockers**
  - **May worsen psychosis**

# Involuntary Movements

- **Choreo-athetosis**
  - **fast contraction – relaxation**
  - **writhing**
  - **Acute**
  - **Chronic = Tardive dyskinesia**
    - **Tx = anticholinergic, antihistaminergic**
    - **Masked by increased dose**

# Acute movements

- **EPS:** extra-pyramidal symptoms
  - Tremor; stiffness
- **Dystonia:** sustained contraction
  - Ocular-gyric crisis
  - Laryngospasm
  - Diaphragm
  - Large/small muscle groups
- **Dyskinesia:** disordered movements

# Assessment

- **Observation**
  - At rest
  - With arousal/exertion
- **Examination**
  - Tone, range, speed, fluidity
- **Stimulation**
  - releases inhibition; over-rides

# Assessment tools

- **AIMS**

Abnormal Involuntary Movement Scale

- **SIMAS**

Sonoma Involuntary Movement Assessment Scale

- **DISCUS**

Dyskinesia Identification System – Condensed User Scale

- **Bedside Neurological exam**

# Summary

- **Antipsychotic medications can be useful**
- **Increased risk TD outside of primary psychotic d/o**
  - **consent to risk/benefit**
- **Assessment for side effects must be documented**

Next presentation:

**3-12-2013**

**Challenges of memory and attention in  
TBI & I/DD**

resources and back issues can be found at Continuum  
of Care website:

<http://som.unm.edu/coc/Training/powerpointnew.html>