**Medications Associated with the Onset of Tardive Dyskinesia**

Christine B. Hunter, RN, Christopher Kenney, MD, Nicte Mejia, MD, Anthony Davidson, BS, and Joseph Jankovic, MD
Parkinson’s Disease and Movement Disorders Center, Department of Neurology, Baylor College of Medicine, Houston, Texas, USA

**ABSTRACT**

OBJECTIVE: To define the offending drugs associated with the occurrence of tardive syndromes in patients referred to a movement disorders clinic. BACKGROUND: TARDIVE DYSKINESIA (TD), a hyperkinetic movement disorder causally related to dopamine receptor blocker drugs (DRBD), is a well-recognized iatrogenic disorder. Although published reports on TD mainly focus on patients who have been exposed to DRBD used as anti-psychotics, these medications are also used to treat a wide array of medical, chiefly gastrointestinal, conditions. METHODS: A retrospective chart review was performed on subjects evaluated for TD in the last 15 years at their initial evaluation. RESULTS: We report data on 434 patients listed in our database for whom we have detailed clinical information. The patients, 334 female (77%), had a mean age of 53.8 ± 14.8 years at their initial evaluation. A causal DRBD was well defined in 411 (94.7%) patients. The most common medications associated with the onset of TD were haloperidol (N=191, 18.4%), chlorpromazine (N=171, 16.5%), the combination of Amitriptyline and Perphenazine (N=85, 8.2%), and thioridazine (N=72, 6.9%). Prospective longitudinal studies are needed to confirm whether atypical neuroleptics have a lower risk for TD than the traditional typical neuroleptics. DISCUSSION In this review of 434 patients referred to a movement disorders clinic with prior history of exposure to DRBD, the most common medications associated with the onset of TD were haloperidol (N=191, 18.4%), metoclopramide (N=171, 16.5%), the combination of Amitriptyline and Perphenazine (N=85, 8.2%), and thioridazine (N=72, 6.9%). Proper prospective treatment protocols should be adhered to confirm whether antipsychotics have a lower risk for TD than the traditional typical neuroleptics. **TABLE 1. Some conditions that may require DRBD therapy**

- Gastrointestinal
  - Ulcer disease
  - Endoscopic Barrett’s esophagus
- Nausea, vomiting, GERD, diabetic gastroparesis
- Epilepsy
- Parkinson’s disease
- Neuroleptic malignant syndrome
- Other:**
  - Anxiety, depression, schizophrenia, bipolar disorder, alcoholism.

**TABLE 2. Medications with the potential to cause TD**

- Amitriptyline
- Amoxapine
- Butyrophenones
- Chlorpromazine
- Clozapine
- Cymbalta
- Dibenzazepine
- Fluphenazine
- Haloperidol
- Metoclopramide
- Molindone
- N-acetyl-4-Dopamine
- Nardilate
- Pimozide
- Promethazine
- Trifluoperazine
- Tricyclics
- Other**

**TABLE 3. Demographic and clinical characteristics of 434 TD Patients**

- Sex: 100 (23.5%) male, 334 (76.5%) female
- Mean age at initial evaluation: 63.8 years ± 14.8 (SD)

**REFERENCES**