Medications Associated with the Onset of Tardive Dyskinesia

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ABSTRACT

Tardive dyskinesia (TD), a hyperkinetic movement disorder causally related to exposure to dopamine receptor blocking drugs (DRBD), is a well-recognized adverse effect of medication treatment. Although the 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.

METHO: A retrospective chart review was performed on subjects evaluated for TD in the Movement Disorders Clinic at Baylor College of Medicine who were enrolled in our tetrabenazine (TBZ) trial. Demographic and clinical data were recorded. RESULTS: A total of 116 TD patients with TD currently treated with TBZ were included in our study. The mean age of TD onset was 62.3 ± 13.9 years, with a mean age of TD onset at 14.1 years.

RESULTS: The most common medications associated with the onset of TD were metoclopramide (N= 23, 25.8%), haloperidol (N= 9, 10.1%), the combination of amitriptyline and perphenazine (N= 9, 10.1%), and risperidone (N= 7, 7.8%). Loxapine was also associated with TD in 3 patients (3.3%).phenothiazines and thienobenzodiazepines (e.g. Tarctan, Promethazine, Fluphenazine, Chlorprothixene, Perazine, Mesoridazine, and Tiapride) were also associated with TD in children and adults. In addition, other medications associated with TD were ziprasidone (e.g. Geodon), amoxapine (e.g. Asendin), and olanzapine (e.g. Zyprexa).

CONCLUSIONS: TD may be caused by multiple treatment agents, and it may be more common than previously reported. More research is needed to develop new medications that, without dopamine receptor antagonists, are able to treat conditions in which DRBD are currently employed.

REFERENCES


CONCLUSIONS

- Although most drugs with the potential to cause TD belong to the antipsychotic family of drugs (phenothiazines, thioxanthenes, butyrophenones, etc.), other medications for non-psychiatric-related problems, such as metoclopramide (substituted benzamide), are also DRBD and can cause TD.
- Tardive dyskinesia is also an important cause of TD in children. It seems to be under-recognized only two children with tardive dyskinesia-induced TD are reported in the literature (Purkay et al., 1986; Mejia and Jankovic, 2005a). More prospective or retrospective cohort studies are needed to determine the true prevalence of metoclopramide-induced TD in children.

METHODS

A retrospective chart review was performed on subjects evaluated for TD in the Movement Disorders Clinic at Baylor College of Medicine who were enrolled in our tetrabenazine (TBZ) trial. Demographic and clinical data were recorded. RESULTS: A total of 116 TD patients with TD currently treated with TBZ were included in our study. The mean age of TD onset was 62.3 ± 13.9 years, with a mean age of TD onset at 14.1 years. The most frequent medications associated with TD were metoclopramide (N= 23, 25.8%), haloperidol (N= 9, 10.1%), the combination of amitriptyline and perphenazine (N= 9, 10.1%), and risperidone (N= 7, 7.8%). Loxapine was also associated with TD in 3 patients (3.3%).phenothiazines and thienobenzodiazepines (e.g. Tarctan, Promethazine, Fluphenazine, Chlorprothixene, Perazine, Mesoridazine, and Tiapride) were also associated with TD in children and adults. In addition, other medications associated with TD were ziprasidone (e.g. Geodon), amoxapine (e.g. Asendin), and olanzapine (e.g. Zyprexa).

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