

Tardive dyskinesia: Prevention and treatment

Literature review current through: Feb 2013

INTRODUCTION — Tardive dyskinesia (TD) is a hyperkinetic movement disorder that appears with a delayed onset, usually after prolonged use of dopamine receptor blocking agents, mainly the antipsychotic drugs (also called neuroleptics) and the antiemetic drug metoclopramide. TD has numerous clinical manifestations that include chorea, athetosis, dystonia, akathisia, stereotyped behaviors, and rarely, tremor. The term "tardive" differentiates these dyskinesia from acute dyskinesia, parkinsonism, and akathisia, which appear very soon after exposure to antipsychotic drugs. TD is a clinical diagnosis, but tests may be performed to exclude other causes of the patient's symptoms.

PREVENTION — Prevention of tardive dyskinesia (TD) and the early detection and treatment of potentially reversible cases of TD are of paramount importance. **The only certain method of TD prevention is to avoid treatment with antipsychotic drugs and metoclopramide.**

- The use of antipsychotic drugs, particularly for > 3 months, requires careful evaluation of indications, and risks and should be limited to situations where there is no safer effective therapy.

As an iatrogenic disorder, TD has medicolegal implications. Thus, it is important to inform patients of the risk of developing TD before treating with antipsychotic drugs or metoclopramide. Once started on these medications, patients should be monitored periodically for the development of TD.

Guidelines for antipsychotic drug treatment — The American Psychiatric Association Task Force report on TD lists specific indications for short / long-term antipsychotic drug treatment. This is very important since TD is often irreversible despite cessation of the offending drug. They made the following recommendations:

- Long-term use of antipsychotic drugs in neurosis, depression, anxiety, personality disorder, and chronic pain states should be discouraged.
- Even in schizophrenia or related chronic psychosis, efforts should be made to maintain patients on the lowest effective dose of antipsychotic drugs while reexamining the need for continued treatment at least every six months. After remission of a first acute psychotic episode, the dose of antipsychotic drug should at least be decreased, and probably best discontinued, within 6 to 12 months. Plans to continue treatment beyond six months require discussion with the patient and family regarding the indication for prolonged antipsychotic drug treatment and the risks of TD. (See "Pharmacotherapy for schizophrenia: Side effect management".)
- **Particular care is indicated for patients age 50 and older, patients with affective disorder, patients with treatment-resistant schizophrenia and negative symptoms, and possibly women.**
- Since acute antipsychotic drug-induced parkinsonism and akathisia are an indicator of the extent of D2 receptor blockade, these adverse effects should be avoided by dose reduction or by use of a less potent agent. Drug-induced parkinsonism may also mask signs of dyskinesia. It is prudent to use the smallest effective dose required to control an individual patient's symptoms.
- **Except for prevention of acute dystonic reactions, chronic use of prophylactic anticholinergic drugs should be discouraged since they do not prevent TD and can aggravate the involuntary movements once they emerge.**
- Early antipsychotic drug withdrawal results in a better prognosis for recovery. Thus, patients on antipsychotic drugs should be carefully monitored for signs of TD at regular intervals with use of a standard dyskinesia rating scale such as the Abnormal Involuntary Movement Scale (AIMS), which is useful to heighten awareness of mild manifestations of TD.
- Where possible, antipsychotics should be tapered and discontinued as soon as the diagnosis of TD is made, although control of the patient's psychosis may ultimately be the most critical factor in the use of the offending drug.

For patients who are developing signs of TD while receiving first generation (conventional) antipsychotic drugs, but still require treatment for psychosis, it is now considered prudent to switch to second generation (atypical) antipsychotic drugs that may be associated with a lower risk for TD. However, there is no convincing evidence that altering the medication regimen ameliorates the course of TD once symptoms have developed.