Tardive Dyskinesia

Long-term use of so-called “neuroleptic drugs” (anti-psychotic medications), which are used to treat schizophrenia and related psychiatric disorders, often causes as a side effect a disorder known as tardive dyskinesia. The term tardive (which means “late”) is used because the condition appears only after chronic use of drugs such as chlorpromazine (Thorazine), thioridazine (Mellaril), and trifluoperazine (Stelazine). Dyskinesia means “abnormal movement.” Individuals with tardive dyskinesia suffer from repetitive and uncontrollable movements (such as lip smacking and moving their legs back and forth) that can interfere greatly with their quality of life. Tardive dyskinesia may gradually diminish in severity after the medication is discontinued, but all too often the problem persists after drug withdrawal and becomes permanent. Conventional treatment for tardive dyskinesia is unsatisfactory, so prevention is considered crucial. It is important that individuals requiring neuroleptic drugs be given the lowest effective dose and that treatment be discontinued as soon as it is feasible.

Nutritional supplements that may be helpful: During a ten-year period, doctors at the North Nassau Mental Health Center in New York treated approximately 11,000 schizophrenics with a megavitamin regimen that included vitamin C (up to 4 grams per day), vitamin B3—sometimes in the form of niacinamide (up to 4 grams per day), vitamin
B6 (up to 800 mg per day), and vitamin E (up to 1,200 IU per day). During that time, not a single new case of tardive dyskinesia was seen, even though many of the patients were taking neuroleptic drugs. Another psychiatrist who routinely used niacinamide, vitamin C, and vitamin B-complex over a twenty-eight year period, rarely saw tardive dyskinesia develop in her patients. Further research is needed to determine which nutrients or combinations of nutrients were most important for preventing tardive dyskinesia. Levels of niacinamide and vitamin B6 used in this research may cause significant side effects and require monitoring by a nutritionally oriented doctor.

Vitamin E has been found in a number of studies to reduce the severity of tardive dyskinesia. In a double blind study, twenty-eight individuals with tardive dyskinesia were randomly assigned to receive vitamin E (800 IU per day for two weeks and 1,600 IU per day thereafter) or a placebo. Vitamin E was significantly more effective than placebo in reducing involuntary movements. Other studies have also found that vitamin E supplements reduce the severity of tardive dyskinesia. Two studies failed to show a beneficial effect of vitamin E. However, the patients in those studies had been receiving neuroleptics for at least ten years, and research has shown that vitamin E is most effective when started within the first five years of neuroleptic treatment.

Although it is not known how vitamin E works, some doctors believe that it prevents neuroleptic-induced oxidation damage of certain parts of the brain.
One doctor has found that administering the trace mineral manganese (15 mg per day) can prevent the development of tardive dyskinesia and that higher amounts (up to 60 mg per day) can reverse tardive dyskinesia that has already developed. Others have reported similar improvements with manganese.

Several individuals have experienced an improvement in tardive dyskinesia while taking evening primrose oil. However, in a double blind study, supplementing with evening primrose oil (12 capsules per day) resulted only in a minor, clinically insignificant improvement.

Choline and lecithin (a dietary source of choline) have both been used for individuals with tardive dyskinesia. While some studies have shown a beneficial effect, others have failed to find any improvement. Nutritionally oriented doctors do not often recommend choline or lecithin for individuals taking neuroleptic medications, because it could, on occasion, trigger depression.

**Are there any side effects or interactions?** Refer to the individual supplement for information about any side effects or interactions.

**References:**


