Introduction
Update on Tardive Dyskinesia

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Movement disorders that are associated with psychotic syndromes have been recognized for hundreds of years; as an example, abnormal facial movements have been noted in some medieval art works. Both Kraepelin and Bleuler recognized orofacial and limb movement disorders in patients with untreated schizophrenia. Each described patients with features resembling extrapyramidal symptoms (EPS) and/or tardive dyskinesia—such as catatonia, stereotypies, mannerisms, tremors, grimaces and dyskinetic movements of the tongue and lips, and sudden involuntary gestures. Over the last several decades, physicians have noted that spontaneous dyskinesias occur infrequently and that tardive dyskinesia occurs commonly in patients taking typical antipsychotics (neuroleptics). One possible explanation is that antipsychotics may convert a covert vulnerability to an overt expression of involuntary hyperkinesias. This Supplement is derived from a symposium in which an update (and a possible early requiem) was presented on the subject of tardive dyskinesia.

Mechanisms of the pathophysiology of tardive dyskinesia are unknown, but the relative contributions of antipsychotic drugs, psychosis or central nervous system disease, age, and other variables have been explored as causative factors and are discussed in my article. Animal models and clinical investigations provide a rich research base for understanding neuroleptic drug actions, but no specific pathophysiologic process has been identified.

The scarcity of schizophrenic patients never exposed to neuroleptic medications limits an estimation of the prevalence of spontaneous dyskinesias and is well documented, said Wayne S. Fenton, M.D. However, data from studies of neuroleptic-naive schizophrenic patients were used to generate age-adjusted estimates of the prevalence of spontaneous dyskinesias. These data reveal that untreated schizophrenia, particularly in its most severe form, appears to have a motor component in a significant number of patients.

Variability exists among incidence studies of tardive dyskinesia, according to William M. Glazer, M.D. In the first of 2 articles, he describes the design concepts of incidence and prevalence studies along with results, methodological problems, and identified risk factors in several tardive dyskinesia incidence studies in which typical antipsychotic medications were used. In a succeeding article, Dr. Glazer discusses the known effects of the newer atypical antipsychotics on tardive dyskinesia in schizophrenic patients undergoing long-term treatment with olanzapine or haloperidol.

Dilip V. Jeste, M.D., points out that neuroleptic-induced tardive dyskinesia may appear early in the course of treatment in middle-aged and elderly patients and is 5 to 6 times more prevalent in older than in younger patients. Although there is a paucity of controlled studies, the atypical antipsychotics appear to have a low liability for EPS and tardive dyskinesia and are the preferred first-line treatment in elderly psychotic patients.

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Psychosis commonly occurs in patients with mood disorders, according to Paul E. Keck, Jr., M.D., and colleagues. Despite a number of limitations, typical antipsychotics have traditionally been used adjunctively in the treatment of acute mania and acute psychotic bipolar and unipolar depression. Advantages of many newer atypical antipsychotics include minimal EPS and prolactin effects, inherent thymoleptic activity, and low rates of tardive dyskinesia.

The best treatment for tardive dyskinesia and dystonia is prevention, which is a function of medication choice, affirmed George M. Simpson, M.D. If clinicians use atypical antipsychotics as first-line medications, tardive dyskinesia is likely to be reduced. Patients who have tardive dyskinesia and are taking neuroleptics are candidates to have their medication changed to an atypical antipsychotic. Thus, atypical antipsychotics can be used to both prevent and treat tardive dyskinesia.

Of the various drug therapies, antipsychotic medications present novel twists to old issues in law and psychiatry, offered Ralph Slovenko, J.D., Ph.D., who discussed the legal issues of standard of care, informed consent, the right of institutionalized patients to refuse treatment, statute of limitations, and causal nexus.

Atypical antipsychotics, when given in recommended therapeutic doses, appear to greatly reduce the liability of tardive dyskinesia. Therefore, this symposium may be one of a diminishing number of meetings on the topic of tardive dyskinesia, which has been such an important part of psychiatry. It is rare for a syndrome to appear and then disappear during a clinician's lifetime, but that may well be the case with tardive dyskinesia. In the distant future, drug-induced movement disorders in psychiatric patients receiving antipsychotic medicine may be presented to students as an uncommon, even rare, clinical event.