Are All Atypical Antipsychotics Equal for the Treatment of Cognition and Affect in Schizophrenia?

By Joseph Zohar, MD

One of the major developments in psychiatry in the last decade is the development and widespread use of the new antipsychotics. The field has moved from the typical dopamine D₂-blocking neuroleptics into the new era of antipsychotics with the addition of the serotonin 5-HT₂A properties to the classical D₂ antagonism. These "atypical" antipsychotic drugs (APDs) provide us with new tools with which to treat our patients. However, do we really know how to make the most of these new medications? Are we equipped with the knowledge to do the best matching between the different APDs and the patients that we will see in an hour's time?

One potential way to get the maximum therapeutic effect of a specific medication is to improve the matching between the compound and the patient that we are seeing, i.e., to try and get the best medication for the patient. For example, the medication one would choose for a patient with cognitive decline and a tendency to be overweight, would likely be different from an antipsychotic one would select for a patient with the same diagnosis, but who is slim and has paranoid delusions. It is also intuitively clear to us that we should treat first-episode patients differently from those with a 20-year history of social decline. Similarly, a patient with pronounced affective component would receive a different treatment regimen from a patient who is affectively "flat."

Although we have been hearing and reading a lot about all the different APDs, it would be quite accurate to postulate that a concise updated summary of the different APDs, examining them around four different critical axes, might be welcomed by our readers.

The topics covered in this supplement are: the differential receptor's profile of APDs and their clinical implications, the issue of cognitive impairment in schizophrenia and APDs, monitoring guidelines to assess metabolic abnormalities that may occur with APDs, and an update on treatment after first-episode psychosis.

In the first article, Darius K. Shayegan, BS, and Stephen M. Stahl, MD, PhD, address many intriguing questions such as why does one patient respond to one agent and not to another? How is it that some patients experience side effects with one agent, yet others do not? All these questions focus on the fundamental dilemma of how to select the medication which is best fitting in terms of receptor profile on one hand and the patient's clinical needs on the other. They also emphasize the issue and importance of appropriate dosing.

Next, Herbert Y. Meltzer, MD, focuses on the cognitive impairment and negative symptoms in schizophrenia. In his scholarly review, Dr. Meltzer describes, among other issues, the developments in mapping the different roles of 5-HT receptors (e.g., 5-HT₂A versus 5-HT₆ and 5-HT₇) in cognition and the potential implications for the APDs in treating cognitive deficits early on.

The third article deals with the primary hippocratic principle of primum non nocere ("first, do no harm") by providing the reader with practical and useful guidelines to monitor weight, glucose, and lipid imbalance. In his article, Jonathan M. Meyer, MD, gives us a balanced perspective and practical tools to prevent severe somatic side effects while using APDs.

Finally, Lili C. Kopala, MD, FRCPC, describes the role of APDs in early intervention and long-term maintenance after first-episode psychosis as a potential way to improve long-term outcome.

The contributors should be congratulated for their efforts to bring us a scholarly comprehensive overview about different aspects of using APDs. One of the goals of CNS Spectrums is to bridge the gap between the experts and the clinician, and I hope that this supplement will indeed succeed in this mission.