

## **New Medications for Treating Psychiatric Disorders**

*Summarized by Thomas T. Thomas*

For people coping with a mentally ill family member or friend, the past few years have been an exciting time as ever more effective drugs, with fewer side effects, have arisen to curb psychiatric disorders. The speakers at our September 27 meeting, **Gary L. Viale, PharmD**, and **Laurel Mechling, MBA**, offered an update on the new antipsychotic medications.

Dr. Viale is Assistant Director of Pharmacy and Assistant Clinical Professor at the University of California at San Francisco. He is affiliated with the Santa Clara Valley Medical Center and was instrumental in convincing the Santa Clara County Mental Health Department to pay for the new, more costly schizophrenia medications because they can reduce clients' hospital stays. Dr. Viale also co-authored ASA-AMI's popular brochure "Medications for Mental Health" with Carole Calkins, PhN.

Ms. Mechling is a psychiatric technician with 20 years of mental health experience who coordinates Santa Clara County's Risperidone and Clozapine Program and set up its Quality Assurance Committee.

"The decade of the 90s," Dr. Viale said, "has focused on understanding the mind and the medications for it. Pharmaceutical companies are now seeking new medications to address mental health issues, which they weren't doing as little as ten years ago."

Public conceptions of mental illness remain rooted in false and outmoded ideas, he said. The majority of Americans still thinks mental illness is caused by emotional weakness, bad parenting, or some kind of sin. They either think mentally ill people should be able to overcome their illness by force of will, or that mental illness is totally incurable.

Only a minority recognizes the truth: that mental illness is biological, caused by a chemical imbalance in the brain. In this respect it's no different from diabetes.

Neuropsychiatry has identified 40 substances in the brain, called neurotransmitters, that affect a person's thinking. Of these, the big four are serotonin, which at reduced levels can cause depression and suicide; dopamine, which at high levels is implicated in schizophrenia; acetylcholine; and norepinephrine.

The new antipsychotic drugs, primarily Clozaril (generic name Clozapine) and Risperdal (generically Risperidone), don't necessarily work better than older drugs like Haldol and Thorazine. What the new drugs offer is fewer unpleasant side effects, which means that people will stay with them longer and tolerate the higher doses needed to experience improvement.

These drugs can be very expensive. Risperdal costs \$438 for one hundred 1 mg tablets, and an effective dose can be as much as 16 mg a day. That's a daily cost of \$70—or about \$2,100 per month!

Clozaril can sometimes be risky, too. This drug is very effective with both positive and negative symptoms of schizophrenia, but it has dangerous side effects. These effects are difficult to predict because every person metabolizes the drug differently. Clozaril can cause low blood pressure and agranulocytosis—destruction of the immune system's white blood cells—which can be fatal. Patients on Clozaril also have difficulty regulating their body temperature, which makes them susceptible to heat stroke. They can also suffer Parkinson-like symptoms, including a shuffling gait and stooped posture. And at higher doses, 600 to 900 mg, Clozaril presents a 5 percent chance of *grand mal*-type seizures.

So a patient on Clozaril must have weekly doctor visits and blood tests, and must get his or her prescription filled weekly because a physician cannot legally prescribe the drug for longer periods. Few schizophrenics on an outpatient basis can tolerate that much travel and hassle. And a patient on Risperdal often needs financial help with his or her treatment, because few schizophrenics are independently wealthy.

Because of these drawbacks, Ms. Mechling helped set up Santa Clara's oversight program for dispensing these drugs to county-supported clients.

The first part of her program includes the Quality Assurance Committee, with representation from local psychiatrists and mental health workers. They set up guidelines for using these drugs, study clinical outcomes and quality of life issues as well as the fiscal impact on the county, and review each physician's applications for starting a patient on the drugs.

In general, a patient must have a primary diagnosis of schizophrenia or bipolar syndrome, have previously failed with two of the older drugs, or suffered tardive dyskinesia (involuntary lip movements).

The Santa Clara County program has now had five years of experience with Clozaril, involving some 300 clients, and just about one year with Risperdal, involving 481 clients. The program does not deny anyone Risperdal but, because of the cost and budget considerations, may limit it to inpatient treatment or use with clients who suffer intolerable side effects on the other drugs.

Ms. Mechling recently coordinated a survey of Risperdal use in its first six months of availability. Based on 185 responding physicians, she found that about half of the patients were still with the drug and half had discontinued it.

Of those still using Risperdal, 77 percent took the drug alone—which is unusual, because physicians often mix antipsychotic drugs for best results. In addition, 70 percent of patients reported no side effects, which is also unusual.

Of those who had discontinued the drug, only 12 patients had been on Risperdal alone. The largest reason for quitting was reported side effects, including restlessness at high dosages, sleep disturbances early in treatment, fatigue and weakness, and uncontrollable motor movements. Some patients—often those with the most severe schizophrenic symptoms—also could not follow through with the medication program, which is not unusual.

Over all, when physicians were asked to rate Risperdal on a scale of -5 to +5, they responded with a typical bell curve, showing 25 percent of patients having

a good to excellent response, 22 percent moderate improvement, and 21 percent only mild response.

At our ASA-AMI meeting, Dr. Viale was asked how soon there were likely to be low-cost generic alternatives for these drugs. Clozaril, he said, has just come off its patent period, but because of the life-threatening side effects few pharmaceutical companies would risk offering a generic version. And Risperdal, being a newer drug, was going to be under patent for many more years.

Asked about interactions with these drugs, especially in the patient who wants to take “just one beer,” he said that alcohol and street drugs can interact strongly—sometimes violently—with the antipsychotic medications and should be avoided. Caffeine, on the other hand, doesn’t interact with the drugs directly but does tend to worsen the patient’s underlying disease state and so should also be avoided.

A third questioner wanted to know if, once a patient was stabilized at a therapeutic dose, his body ever built up a tolerance to these drugs. Dr. Viale said that rarely seems to happen. If the drugs seem to lose their effectiveness, it’s more likely that the disease itself has worsened.

As a last thought, Dr. Viale offered the observation that patients, physicians, and institutions on the East Coast spend much more—“phenomenally more”—on mental health treatments than we do here in the West.

“So we want to get the most for our buck in medication,” he concluded. “The most expensive—but also most effective—drugs are Risperdal, Clozaril, and Prozac. They’re costly, but if we can get people back into society and functioning again, they’re worth it.”