Atypical Antipsychotics Tied to Adrenal Issues

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NEW ORLEANS — It is important to recognize the potential for atypical an-

tipsychotics to cause adrenal insufficiency to ensure that the condition is managed appropriately, according to Dr. Violeta Tan and Dr. Natalie Rasgon.

They described the case of a 54-year-old man with a history of depression and posttraumatic stress disorder who was ad-

mitted to the hospital after complaining of malaise 9 days after a previous admission for a urinary tract infection that had been treated with ciprofloxacin.

At the first admission, the patient was restarted on 225 mg/day of bupropion and 300 mg/day of quetiapine (Seroquel), both of which he had discontinued 6-8 months prior, said Dr. Tan and Dr. Rasgon, who presented the case in a poster session at the American Psychiatric Association's Institute of Psychiatric Services.

Symptoms at the time of the second admission included fatigue, warmth, chills, loose stools, mild headache, and reproducible chest wall pain. Laboratory findings showed that previously normal eosinophil levels were elevated (6.5%-8.3%), reported Dr. Tan and Dr. Rasgon, both of Stanford (Calif.) University.

A work-up for infection, malignancy, and rheumatologic conditions was negative, and primary adrenal insufficiency was ruled out based on the findings of a cosyn-

tropin stimulation test. However, adrenocorticotropic hormone (ACTH) levels (less than 5 pg/mL) indicated secondary or tertiary adrenal insufficiency, and a review of the patient's medications alerted the authors to the possibility of quetiapine-associated ACTH and cortisol reductions.

Atypical antipsychotics such as quetiapine can reduce cortisol levels—often in association with improved psychopathology. Thus, although the cortisol-lowering effects of such drugs may ameliorate negative symptomatology, the reduction could be detrimental, they wrote.

However, adrenal insufficiency caused by such agents has not been specifically studied, and although it might seem appropriate to discontinue the "offending agent," the risks of discontinuing antipsy-



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chotics should be weighed against the benefits of preventing adrenal insufficiency sequelae, they added.

In the current case, which also demonstrated that quetiapine administration, particularly under precipitating circumstances such as an infection or stress, can contribute to reductions in ACTH and cortisol secretion, the patient's condition improved after quetiapine, a standard treatment for adrenal insufficiency, was administered at 20 mg every morning and at 10 mg at bedtime.

Atypical antipsychotics can cause adrenal insufficiency, which presents ambiguously, and awareness of this can be key in preventing false diagnoses, they said.



Dr. Tan and Dr. Rasgon say determining whether a patient has developed adrenal insufficiency requires an investigation into four areas:

- ▶ Symptoms. Look for weakness and fatigue, abdominal distress, anorexia, nausea, vomiting, myalgia or arthralgia, postural dizziness, salt craving, headache, impaired memory, and depression.
- ▶ Physical findings. Some factors to look out for are increased pigmentation, postural hypotension, tachycardia, fever, decreased body hair, vitiligo, amenorrhea, and cold intolerance.
- ► Laboratory findings. Red flags include hyponatremia, hyperkalemia, hypoglycemia, eosinophilia, and elevated thyroid stimulating hormone.
- ▶ Clinical problems. Watch for hemodynamic instability, ongoing inflammation, multiple-organ dysfunction, and hypoglycemia.

