**Review of Literature:** Potential pharmacokinetic changes secondary to less vascular circulation in fat versus muscle was evaluated in a retrospective study of pelvic scans. Upper outer quadrant adipose thickness frequently exceeded 1.5 inches, the length frequently used for IM injections. Only needle gauge is recommended for fluphenazine and haloperidol. A 1.5-inch needle is included with olanzapine, risperidone, and paliperidone kits. A 2-inch needle is recommended for obese patients receiving olanzapine. **Conclusion:** Needle length may be of new importance to practitioners. If the anticipated results of IM antipsychotic medication administration are not realized, practitioners are urged to consider patient variables, notably the amount of adipose tissue in the administration area. Increasing the needle length may result in a change in medication effectiveness.

## Pharmacologic Management of Intermittent Explosive Disorder With Multiple Comorbidities in an 8-Year-Old Male

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**Abstract Type:** Therapeutic Case Report. **Background:** Intermittent explosive disorder (IED) is an impulse control disorder characterized by recurrent episodes of aggressive behavior, such as assault or destruction of property, that are grossly out of proportion to any precipitating stressors. Estimated lifetime prevalence of IED ranges from 1% to 11.1%. It is often associated with mood, anxiety, eating, substance use, and other impulse-control disorders. There is limited data regarding treatment of IED in children. **Patient History:** The patient is an 8-year-old male living with his mother and step-family, diagnosed with IED, ADHD, combined type, depressive disorder NOS, PTSD, ODD, rule out bipolar disorder NOS. He was admitted for assaultive and out-of-control behaviors and verbalizing suicidal and homicidal ideations. His biological father physically and mentally abused him from the ages of 1 to 2. He has demonstrated aggressive behavior since toddlerhood (attempted to smother a baby in daycare) and has been expelled from every school that he has attended (assaulted 13 teachers). He was psychiatrically hospitalized at age 6 (stabbed principal with an umbrella). He is in a self-contained class and classified as emotionally disturbed. Combinations of carbamazepine, oxcarbazepine, risperidone, quetiapine, aripiprazole, divalprex ER, methylphenidate, OROS methylphenidate, and mixed amphetamine salts ER have been ineffective. During his stay, the oxcarbazepine, methylphenidate, and aripiprazole were discontinued. He required involuntary commitment, chlorpromazine PRN for agitation, and one-to-one precautions for his unpredictability and lability. After 20 days, he was stabilized on olanzapine ODT, trazodone, guanfacine ER, lisdexamfetamine, lithium, and chlorpromazine PRN. **Review of Literature:** Medications that have been found effective for IED in adults include mood stabilizers, phenytoin, SSRIs, B-blockers, a2-agonists, and antipsychotics. Of the mood stabilizers, the most robust evidence for use in children and adolescents lies with lithium. Recent guidelines for the treatment of maladaptive aggression in youth recommend adding an antipsychotic to stimulant treatment if aggression persists in a child with ADHD and then adding lithium or divalproex sodium if symptoms still do not remit. **Conclusion:** This complicated case required the use of multiple psychotropic medications from several different classes. Clinicians should use a multidisciplinary, stepwise approach to treating patients with multiple psychiatric comorbidities.

## Risperidone-Associated Prolactin Elevation and Markers of Bone Turnover Early in Treatment

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**Abstract Type:** Therapeutic Case Report. ACNP Annual Meeting 2011. **Background:** Prolactin elevation has been proposed as a risk factor for low bone density and potentially osteoporosis in patients on long-term treatment with prolactin-elevating antipsychotics. We studied the acute effects of prolactin elevation on serum markers of bone formation and resorption in patients treated with risperidone. **Methods:** Thirty-three participants (61% male, 23.7 $\pm$ 7.1 years of age) meeting *DSM-IV* criteria for schizophrenia (n = 23), major depressive disorder with psychotic features (n = 5), bipolar disorder with psychosis (n = 5), or substance-induced psychosis (n = 1) were enrolled. At baseline, subjects were antipsychotic free for at least 4 half-lives of any prior medication, with 31/33 having less than 4 weeks total lifetime exposure to antipsychotic medications. Subjects were evaluated before and after 4 weeks of risperidone treatment (median daily dose = 2 mg/d, range 0.5-6 mg/d). Assessments included symptom ratings, and AM blood draws to assess testosterone, estradiol, leptin, prolactin, osteocalcin (marker of bone formation), and n-telopeptide cross-links (NTx marker of bone resorption). Primary analysis examined the impact of risperidone treatment on change on the bone markers and hormone levels from pre- to posttreatment. All analyses controlled for age, sex, and risperidone dose. **Results:** Prolactin levels increased significantly from pre- to posttreatment ($P < .001$). NTx markers of bone resorption significantly decreased (improved) from pre- to posttreatment in the study sample as a whole ($P < .05$). Subjects with the largest increases in prolactin after risperidone treatment had the greatest increases (worsening) in their NTx markers of bone resorption. Subjects with smaller increases in prolactin after beginning risperidone treatment had decreases (improvement) in bone resorption. **Discussion:** Risperidone-associated prolactin elevation has significant effects on bone physiology early in treatment. During the acute treatment phase, positive and negative effects on bone resorption were observed, with higher doses potentially detrimental and lower doses associated with a reduction in bone resorption. Our data indicate that these effects begin early in treatment in some patients which may have important implications for long-term monitoring. However, the reduction of bone resorption observed in some patients illustrates that prolactin elevation is not uniformly negative in the acute phase of treatment.

## The Speed of Effects of Atypical Antipsychotic Agents on Cholesterol

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**Abstract Type:** Therapeutic Case Report. **Background:** Over the past decade, the metabolic effects of atypical antipsychotics have been well established through evidence-based medicine. The adverse effects of atypical antipsychotic agents range from weight gain, elevated blood glucose, elevated lipid panel, hyperglycemia-to-elevated blood pressure, referred to metabolic syndrome, when combined. However, more clinical trials are warranted to determine the incidence of the occurrence for metabolic syndrome. **Patient History:** Patient X is a 27-year-old African