

## Prescription of Medroxyprogesterone Acetate to a Patient with Pedophilia, Resulting in Cushing's Syndrome and Adrenal Insufficiency

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*This article provides a case report of a patient with pedophilia who was treated over a 4-year period with medroxyprogesterone acetate (MPA) at a dose of 300 mg/day and as a consequence developed Cushing's Syndrome and adrenal insufficiency, for which he was treated and from which he recovered. He also reported a hypersexual reaction to his own past cessation of MPA. Gonadotropin-releasing hormone agonists, which have a more benign side-effect profile than MPA, are suggested as an alternative to MPA.*

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**KEY WORDS:** medroxyprogesterone acetate; LRHR agonists; leuprolide acetate; antiandrogens; sex offenders; paraphilia; Cushing's syndrome; adrenal insufficiency; hypersexual behavior.

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Medroxyprogesterone acetate (MPA) has been used for years to treat patients with paraphilias (Rosler & Witztum, 2000) and shares some of the pharmacological properties of glucocorticoids (Dux *et al.*, 1998). Use of MPA in doses comparable to those used to treat individuals with paraphilias has been reported as being associated with Cushing's Syndrome and adrenal insufficiency in patients with cancer (Dux *et al.*, 1998; Malik, Wakelin, Dean, Cove, & Wood, 1996) and adrenal suppression has been reported in patients treated with MPA for premature puberty (Sadeghi-Nejad, Kaplan, & Grumbach, 1971). To our knowledge we offer the first

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case report of MPA-induced Cushing's Syndrome and adrenal insufficiency in a patient treated with this agent for pedophilia.

Consultation to evaluate the appropriateness of antiandrogen treatment was requested at a state correctional facility on a 30-year-old male who had a long history of pedophilic behavior and, as an outpatient, had been treated with medroxyprogesterone acetate (MPA) for three years. Treatment had curtailed his sexual urges, but development of mild gynecomastia and obesity led him to discontinue his medication. Over the ensuing several weeks he developed progressive hypersexual behavior, described as more intense than he had previously experienced and characterized by compulsive use of commercial telephone sex lines for 12 or more hours per evening, with 5 or 6 ejaculations per 12-hour period, which persisted for many weeks. These calls were discovered, he was arrested for felony theft, and, while in jail, his MPA was reinstated at a dose of 300 mg/day and continued for the year prior to the consultation.

Physical examination was notable for obesity (body mass index 36 kg/m<sup>2</sup>), truncal fat distribution, a mild buffalo hump, marked gynecomastia, and abdominal stria. Laboratory assessment was notable for 3 fasting AM cortisols less than 1.0 µg/dl (normal range = 4–25 µg/dl). After IV cosyntropin (0.25 mg) cortisol increased only to 6.3 µg/dl at 60 min (normal is at least 7.0 µg/dl). Testosterone was <20 ng/dl (normal: 286–1511 ng/dl). He was treated with hydrocortisone, after which both MPA and hydrocortisone were tapered. Baseline AM cortisol levels were 12.9 and 11.2 µg/dl at 1 and 6 months, respectively, after cessation of medication and testosterone level was 465 ng/dl two years later.

Three aspects of this case are noteworthy. First, clinicians should be aware of these possible side effects of MPA treatment. Second, effective alternative antiandrogen treatment of paraphiliacs is available with gonadotropin-releasing hormone agonists. Although expensive, these agents offer considerable advantages in terms of their side effect profile over progestational agents (Rosler & Witztum, 2000). Third, recent literature has focused on hypersexual behavior as a clinical problem (Stein *et al.*, 2001), which is illustrated by the apparent hypersexual reaction to cessation of MPA reported by this patient.

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