

Buprenorphine-induced Symptomatic Hypogonadism in Men: Case Reports and Discussion

Stephen Colameco, MD, MEd, FASAM,† Joshua S. Coren, DO, MBA,‡ and
Daniel J. Zimmerman, MD**

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Background Excerpt

Sexual dysfunction with decreased serum testosterone concentrations in methadone maintenance patients was first reported in the 1970s.¹⁻⁴ Subsequently, researchers reported that other sustained-action opiates used to treat noncancer and cancer pain can produce symptomatic hypogonadotropic hypogonadism with low serum testosterone and suppression of adrenal androgenic steroids in men.⁵⁻⁹ Methadone-induced suppression of testosterone is mediated by the inhibition of hypothalamic gonadotropin releasing hormone production.¹⁰ Sustained-action opiates also depress adrenal production of dehydroepiandrosterone sulfate (DHEAS).¹¹ In 2005, Bliesener et al evaluated the effects of sublingual buprenorphine (11.2 \diamond 4 mg/d) in 17 men; they did not find abnormalities in serum testosterone, follicle-stimulating hormone, luteinizing hormone, estradiol, or prolactin levels.¹² To our knowledge, there have been no reports of buprenorphine-induced reduction in serum gonadotropins or testosterone. We report 10 cases of apparent hypogonadism in buprenorphine/naloxone treated men.

J Addict Med • Volume 2, Number 3, September 2008

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ISSN: 1932-0620/08/0203-0147