Reproductive steroids and ADHD symptoms across the menstrual cycle.

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Abstract

Although Attention-Deficit/Hyperactivity Disorder shows (ADHD) male predominance, females are significantly impaired and exhibit additional comorbid disorders during adolescence. However, no empirical work has examined the influence of cyclical fluctuating steroids on ADHD symptoms in women. The present study examined estradiol (E2), progesterone (P4), and testosterone (T) associations with ADHD symptoms across the menstrual cycle in regularly-cycling young women (N=32), examining trait impulsivity as a moderator. Women completed a baseline measure of trait impulsivity, provided saliva samples each morning, and completed an ADHD symptom checklist every evening for 35 days. Results indicated decreased levels of E2 in the context of increased levels of either P4 or T was associated with higher ADHD symptoms on the following day, particularly for those with high trait impulsivity. Phase analyses suggested both an early follicular and early luteal, or post-ovulatory, increase in ADHD symptoms. Therefore, ADHD symptoms may change across the menstrual cycle in response to endogenous steroid changes.