Considerations in the Care of Athletes With Attention Deficit Hyperactivity Disorder

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Objectives:
Uncover literature pertaining to: (1) attention deficit hyperactivity disorder (ADHD) and how it impacts athletes; (2) ADHD medication effects; (3) regulations regarding ADHD medications; (4) approaches to conditions similar to, and occurring with, ADHD; and (5) use of stimulants.

Data Sources:
MEDLINE, Ebase, PsycINFO, Cochrane Database of Systematic Reviews, Ovid interface.

Main Results:
ADHD can have many effects on athletes and sports participation. Exercise has positive benefits on ADHD behaviors and players' attitudes. Athletes with ADHD can have worsened ADHD symptoms after concussions. Attention deficit hyperactivity disorder is a modifier of return to play; baseline ADHD symptoms should be used to guide management. Management should include medications, behavioral/psychosocial therapy, and academic accommodations. Behavioral therapy combined with medication is superior to behavioral treatment alone. Sustained exercise as ADHD treatment should be considered mainstay in management. Sports can increase thermogenic effects of stimulants, heat injury, and cardiac arrhythmias. Increased aggressiveness, improved pain tolerance, and decreased sense of fatigued are some attributes of stimulants that are presumed to impart some advantage to athletes, but evidence is uncertain. Attention deficit hyperactivity disorder medications may lead to myocardial infarctions, cerebrovascular accidents, paranoid psychoses, seizures, insomnia, tremors, anxiety, hypertension, and death.

Conclusions:
Athletes' performance and quality of life can be negatively affected by ADHD. Risks exist for those who take ADHD medications. More research is needed on the implications ADHD may have in specific sports, and on possible advantages of medication use. Potential deleterious effects of these medications should be addressed.