

Clinical Pearl

Diagnosing Anabolic Steroid Use

Physicians should look for specific clinical evidence when examining a patient suspected of anabolic steroid use.

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Anabolic steroid misuse is a growing problem in the United States. According to the 2003 Youth Risk and Behavior Surveillance System, 6.1 percent of high school students had taken steroid pills or shots without a valid prescription during their lifetime [1]. Overall, the prevalence of lifetime illegal steroid use was higher among white (6.2%) and Hispanic (7.2%) than black (3.6%) students. Males were more likely than females to engage in illegal steroid use during their lifetime (6.8% v 5.3%). Adolescents who misuse steroids are also more likely to use other illicit substances including alcohol, cigarettes, and marijuana [2].

A complete physical examination provides important evidence about a patient whom you suspect may be misusing anabolic steroids. Many of these exam findings manifest because anabolic steroids are synthetic versions of the primary male sex hormone, testosterone. The physician should look for the presence of:

- Acne
- Gynecomastia
- Cutaneous striae (especially in the deltopectoral area)
- Testicular atrophy
- Needle stick marks in the buttocks, thighs, or deltoids
- Elevated blood pressure [3,4].

Laboratory findings can provide further evidence to support clinical data. Blood tests may reveal:

- Elevated glucose
- Decreased HDL levels
- Increased LDL levels
- Abnormal liver function tests [5]

If the physical exam and routine laboratory testing support the preliminary diagnosis of anabolic steroid use, a physician should test directly for the presence of anabolic steroids after discussing the rationale for the testing with the patient. At this point, the patient may admit to inappropriate use of anabolic steroids. If a patient who is a minor refuses testing and denies steroid use, the physician should speak with the minor's parents or legal guardian before proceeding.

References

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