



Female Athlete Triad

Definition: The term “female athlete triad” refers to three health conditions seen in women who are involved in sporting activities: eating disorders, amenorrhea (absence of menstrual cycles) and osteoporosis (soft bones). Eating disorders include any form of weight loss that is unhealthy – severely limiting food intake, use of laxatives, over exercising, and bingeing and purging (eating large amounts of food, followed immediately by a session of forced vomiting). Amenorrhea is the lack of menstrual cycles due to a decrease in hormone levels. Osteoporosis is a decrease in bone density that can lead to fractures and other bone-related problems.

Common Terms: Anorexia; Bulimia; Stress Fractures

Typical Mechanism of Onset: Normally the triad begins as a result of poor self image. The athlete feels that they are too large, too fat and need to do more to ‘look better’. This is typically seen in sports where visual impressions of the athlete are important – sports like gymnastics, cheerleading, diving, etc. and sports where low body weight is important – cross country running, acrobatics, etc. although female athlete triad can be seen in any sport. As a result of a poor diet over a long period of time, fat and hormone levels are decreased. This may lead to amenorrhea or may delay initial menstruation. Extended periods of decreased hormone levels limit the body’s ability to replace bone cells, which leads to osteoporosis.

Common Signs and Symptoms: Physical signs may include noticeable weight loss, abnormal eating habits, absent or irregular menstrual periods, increased rate of and number of injuries and longer healing time for those injuries. Other characteristics might include depression, mood changes and a tendency to have a “perfectionist” attitude.

Common Treatment: Treatment should include medical, nutritional, and psychological interventions. Counseling and education regarding eating and exercising properly should be implemented. The importance of normal menstruation should be emphasized as well.

Prevention: Education is the biggest key to prevention; that includes coaches and parents as well as student athletes. A strong support group of friends, family, coaches, etc. should be encouraged as well. Education about proper nutrition, weight management and stresses of the sport should be conducted. The athlete should be encouraged to visit a dietitian for nutritional counseling and guidance. The athlete should never aim to lose lean body mass and any effort to lose body fat should be guided by a healthcare professional.

Expectations: Recovery time from the triad varies depending on when the condition is addressed. The more severe the case, the longer the athlete will be monitored, and will be allowed to return to play when a healthcare professional authorizes safe clearance to participate.

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