

Treating the Female Athlete Triad: Eating Disorders, Part One

Ronda Wimmer, PhD, MS, LAc, ATC, CSCS, CSMS, SPS

Female athletes are susceptible to three interrelated conditions: amenorrhea, osteoporosis, and eating disorders -- also known as the Female Athlete Triad. Any female athlete is at risk of developing one or all of the triad conditions.

Essentially, the prevalence of Female Athlete Triad is unknown. Currently, there are no validated Westernized screening tools that can detect at-risk female athletes. Identifying female athletes potentially at risk is subjective at best within the Western medical community, and relies on the clinician's experience and understanding of the triad to ask questions and be aware of certain pre-existing factors. Oriental medicine can provide a portal to understanding and recognizing these conditions via a different perspective. Acupuncturists can be implemented as a screening tool in the prevention of athletes developing any of these three conditions purely by the process of how acupuncturists develop their TCM diagnosis.

Certain sports tend to predispose female athletes to these conditions, such as gymnastics; ballet; diving; running; swimming; figure skating; dancing; and wrestling. These sports tend to create a propensity towards these conditions due to the emphasis upon ideal body images, including appearance and leanness.

Disorders involving the Female Athlete Triad:

- **Amenorrhea:** Amenorrhea is the complete cease of the menstrual cycle. Low levels of estrogen stop the cycle, usually due to very low percentage of body fat; excessive physical/emotional stress; high energy demands; low caloric intake; and poor nutrition.
- **Osteoporosis:** Osteoporosis is the weakening of the bones, allowing them to become fragile and easily fractured. Due to the athletic demands, amenorrhea exacerbates this condition, with a drop in estrogen levels that allows the bone density to build through the absorption of calcium taking place. Teenage and young adult athletes are at an especially high risk due to the amount of soda consumed instead of water, and to poor eating habits. The phosphorus in these carbonated beverages leeches calcium from the bones, thus decreasing bone density and mass, and making the bones fragile and susceptible to stress fractures. Another aspect to consider is the calcium absorption within the body and bone mass. Bone density development is in its prime stages in adolescence and early adulthood. In our thirties, bone stops absorbing calcium and starts to lose bone density.
- **Eating Disorders:** Many female athletes deal with general weight loss and/or maintenance of a thin physique, and will excessively restrict their consumption of food through the number of calories eaten per day (anorexia), excessive exercising to overcompensate for food consumption, and/or bingeing and purging (bulimia).

Within the sports medicine arena, acupuncturists have a very unique position because we address questions predisposing the athletes to these conditions such as menstrual cycle irregularities; emotional stress; self-image; ideal weight; visual appearance; and any extreme dieting habits. Typical signs and symptoms that present themselves include menstrual cycle

stop/start/color/length; clotting; fatigue; dry hair; low body temperature; emaciated appearance; recurrent stress fractures; and/or multiple stress fractures.

Oriental Medicine Views, Part One: Eating Disorders

Anorexia/Bulimia

This condition is a problem in young female athletes between 14 and 20, who have a skewed idea of their body image, and literally have a fear of becoming fat. This individual will decrease the amount of food she intakes to almost nothing to maintain her ideal body image. In addition, there will be an absence of at least three consecutive menstrual cycles. Signs include:

- athlete eats very little
- may purge after eating
- emaciated appearance

Bulimia is an eating disorder of bingeing and purging (i.e., eating and then going into the bathroom and purging in a self-induced vomiting, misuse of laxatives, diuretics, or enemas). Signs include:

- normal or under weight
- decreases food intake or eats compulsively (binges)
- self-induced vomiting (purges)

These distorted beliefs about ideal athletic body image and its prevalence extend from high school athletes through elite levels of competition, specifically in weight monitored and/or body appearance/image sports.

These above conditions, according to Oriental medical philosophy, can create spleen *qi* deficiency over a long period of time, which can progress into spleen yang deficiency. Heart yin deficiency and deficient heart fire can be created by long-term nervous tension stemming from liver *qi* stagnation. This will then affect the kidney yin causing kidney yin deficiency, which supports the liver yin, causing liver yin deficiency, and if untreated, develops into heart yin deficiency. Another possibility is also as a result of liver *qi* stagnation developing into liver fire and translating into heart fire. This is associated more with bulimia.

Treatment Sample of Points

Spleen Qi Deficiency / Deficient Heart Fire (Anorexia)	Yin Deficiency/Fire(Bulimia)
R12, R17: moxa SP1, SP2, ST36, HT8: tonify and/or moxa D20, yin tang: even method	R14, K1, D20: sedate R12, SP6, ST36, K6: tonify Other points to sedate as needed: ST44 or HT8, K2, LV2

I did not mention using herbal formulas in this particular article due to the complexity of individual variables of underlying emotional issues. There are many medical herbal formulas and modifications used in conjunction with the abovementioned acupuncture prescription. In many cases, I integrate Oriental medicine treatments in combination with support group intervention.

Acupuncturists, as part of a sports medicine team, are in a rare and valuable position to identify and help prevent these triad conditions. Acupuncturists also are in a position to educate the athletes in the prevention of female triad conditions, and to educate the sports medicine profession of the advantages acupuncturists can contribute to the field. Not only do coaches, parents and

athletes need to work together, but sports medicine teams also need to do so, with an understanding of other modalities outside the traditional medical mainstream. After all, we are all working towards the same goals - encouraging healthy, safe participation, and preventing short or long-term health imbalances of these female athletes.

References

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