

# Ankle-Foot Bracing for Young Athletes

## *The Practitioner as a Team Player*



By Loretta Sheldon, ROA

*The key for bracing young athletes is to identify the appropriate amount of support without over-bracing the patient and restricting movement.*

**A**s a clinician, it is a great pleasure to have the opportunity to help those with mobility challenges accomplish what they otherwise couldn't. Helping a young athlete who dreams of being the next Michael Jordan or Mia Hamm step out and play alongside his or her peers is truly a rewarding experience.

Like all patients, the key for bracing young athletes is to identify the appropriate amount of support without over-bracing the patient and restricting movement.

The emotional impact associated with wearing a brace is an important consideration. Teens (and some younger children) can be reluctant to wear a brace that will make them stand out from their peers. Parents may harbor a fear that if their child wears a brace, it will result in the child being teased by others. Those are understandable concerns. While it's important to discuss the vital role the brace plays in helping patients overcome their mobility challenges, it is not unusual to compromise in favor of something the child is willing to wear.

### **Comfort Influences Compliance**

Fortunately, most brace manufacturers today go to great lengths to address the concerns of young people and their parents. Today, many braces come in fully customizable colors and patterns.

Sending your young patient off to the game in a brace that matches the team's colors may go a long way toward helping the patient feel more comfortable in his or her brace. And that is no minor detail. A person who feels comfortable in his or her brace is more likely to actually use it.

Other features, such as a hinged brace versus a non-hinged brace, can have significant implications



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for the patient. Young people who wish their brace to be as unobtrusive as possible will not appreciate a hinged brace that clicks every time they move toward plantarflexion (PF). Designs that better accommodate movement via cutouts or flexible struts in the posterior of the brace are a good alternative to hinges.

Steer away from braces made out of very rigid materials. Instead, look for softer plastics that flex with your patient's movements. Braces that are too rigid often lead to overcompensation by the athlete, and negative side effects such as hyperextension of the knee can occur. In addition, patients will need to fit their braces easily and comfortably into athletic shoes. For fit and comfort, it's best if the brace is made of a thin, flexible material.

## Sport Influences Brace Design

Considering the sport your patient plans to participate in is important because the patient's athletic stance will figure largely in determining the appropriate brace design. For example, a catcher in baseball needs to make quick movements from extreme dorsiflexion to standing and PF to throw the baseball. A brace that doesn't allow this movement simply will not work. However, other sports like basketball and soccer tend not to require such extreme foot positions, and therefore lend themselves to a greater variety of brace styles. By evaluating your patient's specific needs, you can then match him or her with a brace that accommodates the motions required by the chosen sport.

Most importantly, consider the level of support your patient needs based on his or her physical challenges. You might ask yourself, "How much voluntary control of postures and movement does my patient have?" In other words, where are the problem areas, and what areas do not need intervention?

## Balancing Support and Ability

When considering the specific bracing needs of a young athlete, you need to find a balance between the amount of correction required to bring the patient's foot alignment into balance and the degree of plane movement you plan to allow or restrict with the device. The key to correcting your patient's specific mobility challenges comes when you've found the appropriate balance between the level of support applied by the brace and the patient's ability to support him or herself. When the brace intervenes only enough to increase stability and confidence without getting in the way of the play, you've met your mark.

Selecting the most appropriate brace for your athletically inclined patient means taking the time to truly understand his or her needs. Running alongside friends and imagining oneself as a sports superstar is a rite of passage. The effort made to communicate well, matched with an appropriate solution, can mean the difference between sitting on the sidelines and getting in on the fun. **WEB QUICK FIND: [EDBRACE0408](#)**

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