

## Screening For Fall Sports: Are You Ready?

Participation in athletics continues to rise in high schools and colleges. With this rise in participation comes an increased risk for injuries. As physical therapists we strive to prevent injuries as well as rehab patients in a quick and effective manner. There are several functional assessment tools that physical therapists can use to evaluate an athlete's movement, strength, endurance, flexibility and balance. Besides focusing in and rehabbing the injured segment or joint, our therapists want to make sure the areas around that segment return to a normal functional state for full, safe return to sport and ADL's as well.

One assessment tool is the Functional Movement Screen which is a ranking and grading system created to document movement patterns that are key to normal function. By examining these patterns, functional limitations and asymmetries are readily identified and can be corrected using certain exercises to mechanically restore sound movement patterns. This assessment tool allows progress to be tracked throughout rehabilitation, or it can also be used by clinicians to evaluate healthy athletes and set up individualized injury prevention programs. The Functional Movement Screen is an analysis of seven basic movements:

- Deep Squat
- Hurdle Step
- In-line lunge
- Shoulder mobility/stability
- Straight Leg Raise
- Push up
- Trunk Rotation

Athletes are scored 0-3 on each of the seven tests. A 3 is assigned if the movement is performed without any compensation or variation in movement. If the total score is below 14 an athlete is more likely to suffer an injury. The type

of injury depends on the sport that the athlete plays and the deficit that the athlete has.

Two other assessment tests that are being used are the Star Excursion Balance Test and the Drop Jump Landing. The Star Excursion Balance Test requires single leg balance while extending the other leg in a series of movement patterns.

FIGURE 1 Reaching directions for the Star Excursion Balance Test.

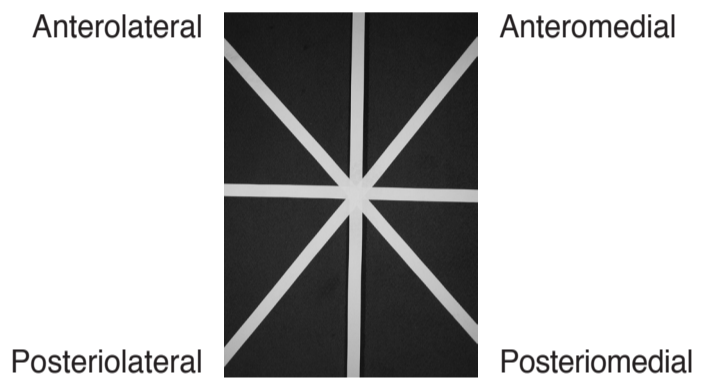


FIGURE 2 Performance of the Star Excursion Balance Test with a left stance leg reaching into the posteromedial direction.

Balance and the ability to maintain stability of the ankle, knee, hip and lumbar spine are assessed. A 10 % variance in score between the right and left leg indicates a possible increased injury risk of the lower extremity. Drop Jump Landing is a video analysis of an athlete's landing position after



### About the Author: Jen Bachtel, MPT

Jen celebrated 6 years with KPT this past summer and is our senior part time physical therapist. She is now eligible to sit for her Certification exam in Hand Therapy and really puts passion into her therapy treatments. She enjoys running, traveling to visit out of town relatives, and her family. She is married to a good basketball player and teacher, Matt, and is enjoying her toddler, Kaitlyn.



jumping from a 12 inch box. Lower extremity control and muscle activation is evaluated and results are used to individualize neuromuscular training and strengthening.

Studies have shown that one can reduce the potential for injuries by more than 80% by simply implementing an appropriate exercise program. That program has to be prescribed by a physical therapist with the skills to pick apart the deficits observed during functional activities, the movement screen tests, a comprehensive evaluation; in addition to normal gait and running patterns. Then the exercise program will be creatively geared, motivating to the individual and have the functional purpose to return the patient or athlete to activity or sport.

Functional movement screens are being used more and more in professional sports to indicate what treatment and exercises athletes should implement prior to participation in sports. Unfortunately these screens are rarely being used at the high school and college level. At Kassimir Physical Therapy we use the Functional Movement Screen along with other

assessment and screening tools to create the most effective exercise / treatment program for patients and athletes.

### **Aquatic Therapy Inservice:**

Gary Kassimir PT, MS, CHT has prepped all of the professional staff with a ½ day in-service on the most recent aquatic therapy advances and techniques. We offer aquatic therapy on Tuesday and Thursday mornings at Meadowbrook Aquatic and Fitness Center, home of Michael Phelps.

### **Staff Additions:**

Lisa Spector, Receptionist/Office Asst., Melissa Ciany, PT tech, Veronica Ashby, PT tech, Adeena Ribiat, PT tech/reception. Over the summer KPT also welcomed Ali Kassimir, Gary's daughter who learned reception duties and will help out during her senior year at OMHS.

**To see pictures of recent events, our staff and news check out our website at [www.kptrehab.com](http://www.kptrehab.com).**

### **KPT News Flash:**

A recent addition to our professional staff includes a graduate from the DPT, Doctor of Physical Therapy program at the University of Maryland, Yoni Rosenblatt, DPT. He joined KPT in June full time and recently had his first child, a beautiful baby girl.



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**KPT  Newsletter**  
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