## 4.1 – Keys to a Failed Spring Ankle Test

As discussed earlier the Spring Ankle Test is composed of three primary components. An athlete is likely to exhibit a faulty movement in one or possibly even all three phases of the test. The question is how to we address these issues based on the specific aspect of the test in which the athlete failed. Let's quickly review the three phases of the test. The three phases of the test include:

- 1) The ability to maintain arch integrity during the standing component
- 2) Performing the single leg squat with forward knee drive
- 3) Athlete must possess the ability to maintain proper toe position function throughout the heel lift to an optimal 45 degrees

As a note, keep in mind that while structural integrity under load is the primary focus of the test, balance does come into play as a secondary element. The most difficult part of administering the test initially is being able to quickly decipher, especially in a team testing setting, whether the structure of the foot and toe is failing or if the athlete is falling victim to poor balance throughout the movement. Be contentious and try to monitor torso movement and overall postural response during the test to ensure that an athlete is not failing the test due to issues with balance and not lack of function in the foot.

When testing an athlete for the first time it is a good idea to slow the test down and pay very close attention to the Tibial Tuberosity and do not let postural deviations sway the results of the test. There will also be a learning curve for the athlete as to properly maneuvering through the test while maintaining proper technique. Once athlete has completed the entire modified test you will be able to identify which phase of the test that the athlete performed the poorest. This will help give insight into which level of the Spring Ankle exercises the athlete should be transitioned.

If the athlete registers a failed response during part one and/or two of the test, this athlete must go back to level one loading parameters. It is always a good idea to review the previous content that we included about the test as the information provided goes into great depth on the exact movements we are looking for during the test. With that said there are quick ques that you will able to identify that will help with efficiency of testing during large group and team times. Quick ques that can be observed in a failed test during part one is a drop in the arch of the foot. This issue can originate from either poor structural control and strength of the foot and toes or it can be manipulated by balance. Pay close attention so that you are able to decipher which issue the failed results are stemming from. The largest variable in the second stage of the test, is the athlete's ability to maintain balance while performing the knee forward squat. Be sure to always allow the athlete to use a dowel as a support system during the test. If the athlete exhibits a failed score during part three of the test, this athlete must go back and follow level three training protocols.

Lastly, remember to pay very close attention to the function of the toes during the final stage of the test. The foot should be able to maintain an arch. The toes should properly move from extension onto the ground while the heel is raised. This is also a great time to identify if the athlete is able to maintain an arch in the big toe while going into plantar flexion. Many times, you will see an elongation or flattening of the of the joint during the test. This provides an excellent opportunity to provide the athlete with feedback about this deficiency prior to initiating training.