

The Dangers of Isometric Testing

By
John G. Nall

PURPOSE

What is the purpose of performing strength tests? Isometric testing is one of many different measurements used to try and quantify strength improvements. Ken Hutchins who is the originator of this current business model many personal trainers follow, and the Superslow™ Exercise protocol - has written a detailed article I recommend reading. Please see <http://www.sszrc.com/articles/guild/es13i.html>

The purpose of these articles is to discourage isometric testing and anyone associating themselves with it.

ORIGIN

To briefly clarify where the term isometric comes from - and why its supposed to be considered a safe method. From the latin terms “Iso” means “same” and “metric” means “length”. So “same length” is to imply the muscle does not move, and should thus be considered safe. This is very similar to if you tried to measure how hard you could push, lift or pull into a concrete wall. When you perform a isometric test, a strain gauge measures how hard you can press into the pad without any movement actually occurring. Just because you don’t move doesn’t mean you cannot injure yourself.

The only way a test can be considered marginally valid, is with a consistent 100% effort every time a test is performed and at every angle. If you ever watch a therapists test a patient the effort is never near 100%, and isn’t even close to 50% in most instances. For this reason alone isometric testing is pointless and invalid.

EXAMPLES

Personally I hold certifications on all five MedX medical machines which incorporate isometric testing in their certifications through the The University of Florida’s College of Medicine and Human Performance. Over the years its become obvious to myself the testing is not only inaccurate, but very dangerous, and completely useless for clients and/or patients. I know many individuals who will concur with experiencing personal pain and discomfort from these tests. A couple examples can be had from Greg Burns, John Nall, Ken and Brenda Hutchins, Jeff Muehl, and numerous former patients will verify these issues with no hesitation. This small list of names are not novices with regards to the strength training principals, but advanced users of the methods. While undergoing a isometric test on the MedX knee extension machine, I suffered severe knee pain during the test which still bothers me weekly. The swelling which occurred immediately after the test was terrifying lingering for months.

Jeff Muehl suffered disk herniations at L4-L5-S1 which eventually caused him to have spinal surgery after his isometric test. After meeting with a group of orthopedic surgeons and neurologists, he received multiple confirmations that the test itself caused fresh herniations at numerous levels. Nearly a decade later, he still suffers from excessive pain levels reminding him of this experience. Its unfortunate, but over the long term additional surgery may be required to control his pain levels.

CONCLUSION

In no way can I put on paper all the dangers of isometric testing. I heard many patients complain of isometric tests, and often avoided them after being exposed to them. Some companies use this type of testing to “prove” their customers/patients are “getting better” to insurance companies and/or referring doctors. I do know this for a fact since at one time I used to own a company which practiced these methods. I can say with a clear conscience it all should be completely avoided. No patient ever gets stronger from a test, and there are many safer methods to quantify improvements and/or motivate a patient/client to improve.