DAVID SELAK: I like talking about the overhead athlete, especially when we're discussing something like the shoulder because it really gives a good avenue to discuss a lot of different things. So this is where we're going to go. I'm going to just real briefly talk about some epidemiology-- actually, mostly focused on baseball. That's an area of treatment that I do a lot of. And again, I think it's a good topic just to bring up when we're talking about the shoulder.

Then we're actually going to talk about some unique stuff that I do-- some training that I've picked up from this group called the Postural Restoration Institute. Then we're going to make some real life application of pitching mechanics, and then go into some of the things Dr. Northway alluded to a little bit earlier talking about the kinetic chain. And then I'm going to focus a little bit more on some baseball stuff as well. I don't have any specific financial disclosures to make, but I mean, I do really like large sums of money. So this is a great day to come talk to me about that because my supervisor is not here. So that's perfect.

So I'm going bring this study up. I think it's a really good study to start with. Especially if you're not as familiar with this population, at least in terms of baseball. And I'd say, being a PT that sees a lot of youth athletes, this study reflects what we're seeing across a lot of different sports. This idea of the single sport kid who plays the same thing all year round, whether it's baseball, or if it's soccer, or if it's something like that. I've got my high school team, my travel team, my endorsees. It's the same sport all the time.

And this study from ASMI took a really big group of youth pitchers, and they looked at a lot of stuff. And one of the things that's really primarily brought up in baseball is going to be the idea of limiting how much kids are throwing. But like I said, this is just a really good reference if anybody is interested in looking at a bigger, almost epidemiological study on youth sports, especially baseball.

So first thing we're actually going to start to go into-- at a shoulder course, probably everybody is expecting this. I'm going to talk about the diaphragm. So kind of interesting. So this group called the Postural Restoration Institute-- they're based out of Nebraska. It's a pretty unique approach in terms of treatment. I'd say, I heard about it initially as I'm starting to take some more courses myself in-- primarily at shoulder symposiums-- bigger things like that. And it's really interesting, some of the concepts they use. And one of the big things they talk about is utilizing respiration as a driver for making alterations in posture, and then basing treatment principles off of that.

So I'm going to start with this picture just because I'm going to reference it a few different times. If you have worked with athletes before-- or maybe not even athletes-- just other patients in general-- but I would say in the athletic population, you see this common almost leaned posture to the point where parents will bring this up a lot when they come in. Why does my son, daughter, whatever have this almost-- you see this-- flat clavicle on the side-- almost a relative tilt to the whole body?

Like I said, we're going to reference this a couple of different times as I'm going through. And this is just initially to start-- some of this is terminology directly out of the Postural Restoration Institute. So they talk about this discussion-- this zone of apposition related mostly to breathing mechanics. So we're going to look at a couple of different points of where they talk about this relative position of rib internal and external rotation. And then I'm going to get into why that's important.

And just to give you this idea visually, you can see just pictures of normal respiration-- breathing in, breathing out. In their terminology, this position of breathing out-- that's the rib external rotation. So if you just imagine ribs expanding versus ribs internal rotating as we expire air.

And here's just another picture of this demonstrating this position. And the reason why they bring this up a lot is if we're looking at just the whole body thing that Dr. Northway started us right off with is scapular position, especially in relation to the shoulder. So having an idea of how the trunk and the thorax and thoracic spine is moving is-- it's really a key concept they talk about.

And these next couple slides are a little bit busy, but basically, it's just to demonstrate differences in-- this is normal anatomy-- so differences in the diaphragm on side to side. So here's the right side. We see this larger diameter-- thicker central tendon-- the attachment points on the lower vertebral bodies, especially in the lumbar spine, versus the left side of the diaphragm-- smaller diameter-- smaller, thinner central tendon-- less attachment points.

Here's a picture of this visually. Obviously we have naturally the liver on one side the heart, and the other-- so that's going to affect this positioning as well. And this is basically a point that they bring up a lot where we haven't even started to talk about, especially in throwing-- right versus left-hander-- doesn't really matter. We're just talking about normal anatomy right now based on the diaphragm. And they really go into this discussion of why is this maybe important?

So I'm actually just skip right ahead. We're going to look at this picture visually. If we see this right side of the diaphragm with this stronger, more dense attachment throughout lower lumbar spine, their main talking point that they discuss is this normal resting posture change where-- I'm going to step over here-- you can kind of see-- and I mean, I should just use myself-- the lumbar spine almost gets into this position of right rotation.

So when you go into a position of right rotation in the lumbar spine, the hips and pelvis are going to move off of that. So as you can see on the left side-- the way that this is depicting in the picture-- you're almost in a position of a relative left anterior pelvic tilt and a right posterior pelvic tilt. So that's just at lumbar spine from that stronger attachment point from the diaphragm. Then if you look down at the hip joints as well, that's also going to be affected.

So on this right side, that relative posterior pelvic tilt-- so I'm just going to effectively give you this position of hip abduction and internal rotation-- versus the opposite on the other side where we're anterior pelvic tilt and a little bit of a position of abduction and external rotation. And if we're going to start working up this kinetic chain-- maybe up to the shoulder-- what's going on above there? Well, we see this dominant pull toward the right side, from lumbar spine down. What starts to effectively happen is we almost see this whole body compensatory shift in thoracic spine and above that lower point.

And this picture is-- I'd say it's kind of almost an extreme, but it's just to illustrate this. So if I'm from maybe about, let's say, waist down-- I'm rotated right-- just based on my natural-- how diaphragm is set up-- how I am anatomically-- I'm kind of overcompensating as I turn back. And this is a big premise they go into. So if we look at this picture-- the one closest to me-- you're going to see this relative position of external rotation in my ribs on the left side versus internal rotation on the right.

And then we really see on this opposite picture away from me, how that's going to affect everything else. So we see this big change in scapular position. That's going to affect muscle length, tension, [INAUDIBLE] relationship in terms of when we do things overhead. So I'm going to go back to our picture we looked at before. You can imagine that looking at this person. So this being the extreme, but this being the real-life application. So I'm just leaning into this right hip. Right side of his trunk is almost internally rotated. Left side is coming up. That's going to give that relative position of a flat clavicle on the right side-- a little bit more angled on the opposite side.

When you really start to imagine looking at him from the back, you're going to see scapular position altered as well. And then when you start to look at something like that, that can really throw you off. Especially if you get a athlete-- patient-- someone that's going to come in with this big resting posture change. You might start looking at other structures. Well, maybe this gives me a relative position of change with my first rib. And maybe it's not even that something like that. Maybe it's more related to this whole trunk rotation.

So I like to start there because then we're going to apply it to something that's a little bit more like a real-life application. So we're going to ramp this speed up. This is resting. Person just standing, looking in front of you. We're going look at something like pitching mechanics. Speed that up 200%, and move that through a really complicated motion.

And I like this image just because it demonstrates a real person. So I thought it was kind of cool to utilize. But the big thing with pitching mechanics is you can really read five different studies, and every study is going to refer to the phases a little bit differently. Really, the idea to understand is the athletes going to go from some amount of a stance position to stride to where they get to this position of full external rotation. And then they're going to this peel-back position.

And so, if we start with this motion-- and we're going to look at this from a right-hander's perspective, initially. So if you look at this very first picture, he's into his initial stance phase. He's going to load that right side up. So I'm going to start to lift my lead leg, and I'm going to load my rear hip. So I'm loading that hip. I'm going to move myself into a position of abduction and internal rotation. Well, if we go back to where we were at before, and our resting posture changed-- it's just based on our normal anatomy-- this right hip is already comfortably in this position of abduction and internal rotation.

So for a right-hander, that's normal, natural, comfortable based on anatomy. That's easy mechanics. I'm just going into a position where my hips are comfortable getting there anyway. And then as I strike forward, the opposite has to happen. So as I strive forward, I'm going to start to load my lead leg. And again, I'm going to load that leg into a position of internal rotation and abduction.

But if my normal resting posture change is-- on my left side-- in my left hip joint-- abduction and external rotation, maybe that means I have difficulty going from this loaded-up rear leg as I transition force. And then that's going to affect everything off of that. So then if we look at the left-hander, it's going to be the opposite. So a left-hander is going to have to load this rear left leg as they start their initial stance. And so basically, you can start to see this resting posture change is really going to throw off mechanics depending on how you're throwing.

And the nice thing about pitching is it's relatively symmetrical. So we can actually start to see some of this, even in the upper extremities too. And again, these are just pro guy's pictures demonstrating this because they thought it was easy to illustrate. We're going to see this relative amount of basically-- as I bring the ball back, I'm going to almost keep myself in a position of supination, somewhat, while I'm pronating my lead arm. And as I pull through, I'm going to reverse that. So I'm going to supinate my lead arm, and I'm going to pronate as I throw forward.

That's going to just be a natural thing we see with a lot of people. And the big thing with that is it's just a part of those normal, natural mechanics. So if that's our basis, like I said-- again, we're going to go back to this resting position. So if we're already having some of this initial change in terms of where I'm starting off-- like I said, that's going to really affect how I do something really mechanically complicated like throw a ball off of a mound.

And some of what Dr. Northway brought up earlier discussing the kinetic chain-- that's a really big thing. And this is obviously a specific example of throwing a ball. But anything where upper extremities are involved-- we talk about this forced transfer from the ground all the way up. So it's something that we can key in with a lot of people. And I hope these videos are still pulled up. And I think they are.

So I'm actually going to show you this. Obviously this is a pro guy, but I'm going to stop this as we're going along. And it's nice because it really slows this down. So as you can see, he's going to start getting into this initial stance phase. So if when I pause it-- maybe right around the top there-- he's in this nice loaded-up position. Obviously, like I said, this again, this is a pro guy.

You can see he's already starting to coil himself up and almost keep that front part of his core nice and engaged and tight. And then, as I let him go through here-- I'm going to pause it again. So he's going to work into this nice, big stride. We're going to get into this stance. So in this stance phase-- this is like I said-- where's he's coming forward. He's in this big fully abducted externally rotated position.

And I wanted to use this video because-- so this is like I said-- this a pro guy. Somebody who has practiced these mechanics over and over and over and over and over because he gets paid a lot of money to do it. But when we look at somebody like him, we can see this symmetrical position. He's in a relative position of supination from his upper extremity-- pronation in his lead arm, initially. You can see this position all the way down as he's transferring force from that rear leg to the front leg.

And when we look at a pro guy like this, this discussion of the kinetic chain is really easy. It's easy to see. So we'll talk about separation. We'll talk about separation from belt line all the way down. So if you look at him here, as you're right here-- so belt buckles face forward. He's already shifting into this front hip. Look at his upper body. Upper body is completely rotated back. So he's effectively started to transition that force load. And he's staying back and keeping that force all coiled up to really deliver the ball forward. And again, this is a pro guy. So he does this over and over and over and over and over.

I'd say, in a youth athlete, we're not going to see that. Maybe the weird phenom-like kid, but this is a 10-year-old. And I would say just to start with kiddos, I'd say the best way to-- they just look stiffer. They don't have the lower extremity strength. They don't have the core control. They just don't know really how to utilize their bodies. A 10-year-old pitcher, he's probably only been doing kid pitch probably for like a year anyway.

So I'm going to let this go fast, initially. So you watch him fast. You're like, OK, cool. He does fine. Throws the ball. So we're going to slow him down. And actually, the funny thing about this is I like this kid's really super-high leg kick. That's funny. So I'm going to stop him in that same spot.

So now, I mean, you look at him there. So I mean, everything is facing forward. His foot is not even in contact and still pushing off in that back spot. He's in this full hyperextended position. We can start to pick out some big stuff like as he goes through-- depending on where you stop it when it goes slow-- his elbow starts to drop. Different, right? Different than that pro guy.

Now, for me, being a rehab specialist, am I going to really tease-out pitching mechanics? No, because I'm not a pitching coach. I don't think that's really our role. I think for somebody like kiddo like this, we can do other stuff. We can look at upper extremity strength. Maybe we throw in some mix of looking at the rest of that kinetic chain. Maybe not expect huge changes in things like a single-leg squat, or a double-leg squat, or a single-leg bridge. But I think just starting and promoting some amount of overall athletic development is appropriate in this type of a population.

So-- bear with me here for a second. Ah, cool. So-- skip ahead of these guys here. And like any youth athlete too, we'll-- I guess when I watch video on kids, I will pick out bigger stuff. This is a big no-no, at least in baseball world-- this reverse W position. Again, these are pro guys.

So this guy closest to me-- Stephen Strasburg-- he's high profile. He's been injured a lot. He's had Tommy John surgery. So he's somebody people gravitate to because he demonstrates this little bit different mechanics. And you can see, he's not really in that nice symmetrical phase. He's kind of in this bilateral pronation position. And at some point in time, as a pro athlete, he's going to get to the same phases as everybody else. So he's going to go into that big externally-rotated peel-back position, but maybe going from a position of almost maximal internal rotation to external rotation. Might not be a good thing. That's a lot on the glenohumeral joint.

So versus the guy in the opposite picture-- that's Mariano Rivera. Classically thought of as being super-clean mechanics-- very durable-- all this kind of stuff-- in this more symmetrical position. And again, not to say that the important thing is that everybody mimics the same mechanics. We're just trying to pick out big things that demonstrate some of these changes.

And I think initially starting and talking about some of that-- these kind of maybe more precarious spots-- I figured I'd go into a topic that gets brought up a lot. We're going to talk about GIRD-- so Glenohumeral Internal Rotation Deficit. I think this is something where-- especially with the shoulder, especially with overhead athletes-- it gets brought up a lot. And I think it's an easy topic because most folks have heard about it. But I think if you don't have an understanding of working with this population, sometimes it's almost you can let yourself get keyed-in just on that.

And it's this whole concept of comparing the dominant to the nondominant side. Especially with something like throwing a ball over and over and over. The tendency is to see changes in range motion-- especially between both sides. And there's been some big studies looking at this a lot in professional sports just because obviously, this is a money thing-- I mean, having an understanding of injury implication. But there has been some more-- I'd say over the past several years, kicking in the youth athletes as well, and a couple of bigger studies in more pro-level guys that have looked at this.

And one of the big groups is ASMI. Kevin Wilk is a physical therapist who works down there in Alabama. And they look at this concept of not internal rotation motion deficit, but they'll look at total range of motion. And maybe that having more implication to track where you're adding internal and external rotation up and comparing it side to side. And there has been some literature-- like I said-- in younger players, especially in high school athletes where they look at this cutoff of 20-- 25 degrees loss of internal rotation-- dominant to nondominant as being a part of injury implication too.

But I'd say, one of the things that gets brought up-- and Dr. Grant actually hinted at this a little bit too-- this idea of external rotation insufficiency being just almost as important. Where if you throw a ball over and over and over and over and over, and you're not demonstrating some amount of increased external rotation, that may not be a good thing either. Just because that external rotation made active is almost like a protective adaptation.

And when we talk about those adaptations that go on, one of the things we'll discuss is this idea of humeral retroversion. And that's more of an osseous change. It's going to happen as players mature and throw more. And again, the idea that this might almost be a protective thing-- to allow this motion to happen over and over and over. And this picture just demonstrates a way to do this clinically where-- at least a potential way to do it clinically-- you fix the scapula and then just allow the glenohumeral joint to fall into more or less its normal resting position of external rotation.

And then, obviously, you can compare dominant to nondominant side. And that's just one potential mechanism. And then, the thing I think a lot of people are also relatively familiar with is this idea of posterior capsular tightness. And I'd say for myself, initially being a young PT when I first got out of school, I just assumed everybody with internal rotation deficit had posterior capsular tightness. Which is really not the way to think about it, at least in terms of my opinion after I've worked in sports medicine for a little while now.

And there's a really interesting study that Mike Reinhold, a physical therapist, did looking at-- taking pitchers specifically after throwing a bullpen-- maybe 50 to 60 pitches-- I guess a little bit more than a bullpen. But they took range of motion measurements 30 minutes right after they did it-- or within 30 minutes-- and then a day later-- 24 hours. And some of the implications that they found were, obviously, things that we would expect. So right away, players demonstrated a loss of internal rotation and also elbow extension. So on the mechanism that they discuss is maybe less of a restriction in the posterior capsule, and maybe more restriction in other soft tissue constraints like the posterior cuff, maybe elbow flexors.

That's why you'll see-- I'd say a lot, like at least people that work in this field-- most players are going to have some type of soft tissue mobility program that they're on with either some form of massage, stuff like that. They'll usually do it the day after a start kind of a thing. Or initially, right after a start.

And that just seems to make more sense to me that it's-- especially that quick of a change-- 30 minutes after a start. Maybe over time, obviously, changes in the posterior capsular are going to occur as you constantly externally rotate your shoulder over and over and over and over and over. A lot of times you're going to demonstrate a little bit of laxity in your anterior capsule as well. So that stuff's going on. But I think those changes in soft tissue mobility are a big thing that people just miss and don't pick up on in their treatments.

And some of the things that we'll do specifically is we'll start-- just really straight forward-- trying to do some passive stretching, especially if we see these range of motion limitations. All these pictures and videos I'm going to show you-- this is actually one of our former techs that used to work for us. But he played club baseball at Michigan. So we just volunteered him. We were like, well, Trevor you played baseball, so you're going to be our model.

So big thing, like in this first picture-- I wanted to show this just because you'll see the kid, you'll see the parent teaching kid, you'll see this kind of thing. This big, giant stretch-- we'll what's really that? And that's not really doing a whole lot. You're trying to stretch that posterior cuff. We'll show kids more of this genie stretch where we have them fix their scap and then pull across.

And then, obviously, this one in the middle. This is a sleeper stretch. I'd say people do this across the board, not just with athletes. I actually don't do the sleeper stretch a ton. I'll sometimes go more for this side-lying cross-body abduction. But just as an idea, depending on the patient, we'll work that in some. We'll also do a fair amount of soft-tissue mobilization ourselves. And we like to teach kids, especially.

And even not even just kids, but I'll do this with even some of my folks like impingement-- stuff like that, where we'll work that posterior cuff-- maybe even some other things like lats, teres major, doing some self-myofascial release. So that's just a baseball kind of dug into-- teres major. And he's just kind of rolling it back and forth there.

You can obviously see in this picture with me, I'm just doing some passive cross-body abduction stretching as well. He's helping me support his arm just because it's easier to control the limb for myself. This picture, I think, is probably distracting everybody though because of my tricep and my big strong lats. So I had to point that out. I've been waiting this whole time to do it.

And then I'm going to show you this video real quick that I wanted to pull up. It's kind of an interesting, unique thing that-- just a study that came out about a year ago. And I'm just going to let this play while I talk. This study by Rafael Escamilla, he's this baseball guy. He does a lot of research. I think he's out in California. They came up with this idea where they just call it the two-out drill.

So if you're a starting pitcher, and you're in a game, it's about the amount of time that you can run through this series of drills that your team has two outs. So it's really quick. You can see Trevor is looking off of the side because he's just mimicking me. Really basic movements-- some arm circles, some in and out kind of stuff-- you can see at the start he's doing some quick elbow stretching.

But the big thing they did then was they measured range of motion right after the same thing. I think they did it like a simulated start kind of a thing. So they had them throw a lot. And they actually demonstrated with just doing something simple like this two-out drill that they could decrease that loss of range of motion. It's kind of interesting. And this was not-- this is initial studies. So they didn't do anything with injury implication-- things like that that discuss that could be a place for this to go. But especially when you're working with let's say high school, middle school, maybe even younger athlete, their attention span is five seconds. I don't even know. So I think simple stuff like this like dynamic movements-- hey, do this just when you start, like if you're going to play a game. It's really easy for them to follow.

And then one of the other things too-- I'm going to go back into more PRI world. One of the things that they discuss is-- they discuss this idea of this-- what they refer to as thoracic GIRD. So if we think about that picture-- and I'm going to play this video in a second-- of this compensated lower rotation upward rotation here-- closed off horizontal clavicle-- this is going to limit how much I can internally rotate at the glenohumeral joint.

So this is actually just me doing a manual technique with them-- or not even a manual technique-- I'm basically just cuing him. And what I'm cuing him to do-- my right hand is almost right underneath his lower left trunk. And I'm actually cueing him just to almost do like a crunch on that left corner. So he's keeping pressure on my hand. And obviously there's no sound, but I figured I'd just talk through it. What he's doing then is he's taking a deep breath in through his nose. And he's almost basically effectively trying to expand this internally rotated position.

So it's just a quick self-correction where we're not doing anything specifically at the glenohumeral joint to help with that rotation. It's more of this whole body shift. And then as he breathes out, what I'm doing is I'm actually having him reach up to try to engage his serratus on that side. So you can see I really make him really stretch out. I mean, I don't do this with everybody. I would say I only throw this in the mix if I think there is a really big component of that whole trunk change.

But I would say in the cases that I have done it-- and there's some other techniques to do this too. This is just a really basic, basic representation of it. There's a pretty good manual technique that I'll do that actually-- it works a little bit better and more effectively. But I'd say in the cases that I have done it, I've started with some soft tissue mobilization. I've started with some passive stretching. I'm not seeing the changes that I want. Something like that makes a really big change in motion like 15-- 20 degrees-- increase internal rotation. And to be honest, I mean-- so again, in PRI world that's what they do. They do this whole breathing pattern thing.

I don't know for myself if I fully think that's a great thing. So if we increase internal rotation that much, what's happening to that external rotation? Is that a detrimental thing, especially when someone's throwing a ball over and over and over, and that's maybe a protective adaptation anyway? And like I said, when Dr. Grant was going into some discussion about looking at some of like labral tears-- things like that. Surgery after that-- it's really hard to get back this range of motion-- really full external rotation, especially for an overhead athlete.

And there's also been some implication too. If you lose external rotation, there's decreasing velocity. Which again, that's not really my primary concern. But I really don't want to have to deal with a parent that's going to bite my head off because their kid was throwing something before and then all of a sudden I made them drop down a bunch in velocity. So there are implications on performance too. But like I said, this is more of like special scenario where maybe I'll throw it in the mix based on a case-to-case basis.

I think I want to demonstrate this important-- importance, obviously, of range motion. But maybe that's not necessarily just a glenohumeral adaptation. Maybe that's something else. Maybe it's a posture thing. Maybe it's core control-- just the way that that trunk is distributed naturally based on anatomy. And then I think if you're looking at this population-- not even just baseball, softball any overhead athlete like volleyball-- I think you have to have some idea of maybe looking at deficits in other places.

So looking at the idea of separation-- that ability to transfer that force from ground all the way up. So that can come through looking at upper extremity strength-- obviously, looking at lower extremity strength. I think like Dr. Northway said about quick assessments in 15 minutes, especially if you're chewing out patients of the day-- I don't think it takes a lot of time to do something like a single squat just so you can see side to side-- super quick comparison. Something like that is really something that's easy to do. And I think that can have a little bit of an understanding just based on--like I said-- that kind of force transfer.

And then, obviously, I'm going to throw this back in just because obviously I'm a PT and I talk about it a lot with patients-- this idea of overuse and injury. The single sport kid that we're seeing is kind of our primary driver-- the soccer kid-- the basketball kid-- the baseball kid. I think it's a big implication, and I don't think we have a great understanding yet how it's implicating an injury. We just know it's happening more and more and more.

So, at least for baseball, there's some really good references to give out to parents. This group-- Pitch Smart-- is put on by MLB. It's kind of the brainchild of ASMI-- American Sports Medicine Institute. They talk about limiting pitching in innings and pitch counts and stuff like that. They also do a good job of putting up general information for injuries and things like that as well. So I give this out to a lot of folks just because I think it's an easy reference. And you get guys like Clayton Kershaw and McCarver and kids sometimes respond to it because they're like, oh, cool. It's a pro guy. I can look into some of this stuff.

And then here are my references. Does anybody have any questions?

AUDIENCE: Do you have input on cool down?

DAVID SELAK: Nope.

AUDIENCE: Or--

DAVID SELAK: No.

AUDIENCE: I mean just--

DAVID SELAK: Most of the time if-- let's say we stick in baseball realm-- but even just with all my other kids too-- I try to get them to do-- if they don't want to do strengthening three times a week is like a [INAUDIBLE] strengthening thing. I actually try to get them to do it after competition. So 10 repetitions of three exercises-- run through some scap stability stuff-- run through some rotator cuff stuff-- done. Like easy-peasy. I just try to get them to get that thought process in their head.

A presentation actually I was just at maybe a couple weeks ago-- like a baseball focused course-- I think it was the team athletic trainer for an MLB team, and he was saying they follow the same principle. Like, hey, if our guys-- especially pitchers-- if they step onto the mound and they throw off the mound in competition, we make them do their strengthening protocol. So I mean, like that, obviously different. Those athletes are getting paid a lot of money. It's hard to get a kid to do anything, depending on the kid.

I mean, some kids are-- they'll gear up and they'll get into it. But I think maybe even using that as an example. Just the past couple of weeks I've been doing that. Just like, hey, this is what pro guys do. They do their strength stuff right after they play a game. And it's really is simple. Like 10-- 15 reps-- done-- easy peasy.

AUDIENCE: With the PRI stuff, do you try to get that they're thinking of activities to bring them out of that assumed position they go into? Is that the gist?

DAVID SELAK: That's the gist of it, yeah. So the course that I went to was a baseball-focused course. So one of the guys there-- I think he's the PT for the Diamondbacks. So I mean, he's PT first. I mean, that's what he's thinking. And he was saying some of the way that he applies it that makes sense to me-- and I would say this is how I've tried to apply it myself-- maybe less of some of the direct interventions that they do that are a little bit different in terms of the breathing pattern and stuff like that. But I will work on pre-positioning.

So I mean, I'll cue people. If I'm going to do-- let's say-- external rotation in 90/90. So I'll cue them. I'll get someone into half-knee length. I'll have them load up their front hip. I'll have them take a deep breath and try to think-- breath back-- so to pull them out of that rotated position. And then I'll have them do 90/90 up there. It's almost like little cues like that. That's about how my brain has been able to wrap around it so far. But it's cool because their treatment process, they apply it to everything. I'm applying it to my small window just because I understand it, and I feel like I had a general good feel for it. But they do some really interesting stuff.