

The basic thing we will cover first is what are the concepts of the fascial distortion model? How can impact this? It's a practice changing tool that you will be able to use nearly every day if you are seeing patients in a situation of acute or chronic pain. We will identify what they are and their gestures as well as practice to become comfortable with the basic SDM treatment approaches. I do have a guest coming later today we will be treating a basketball player who broke his ankle a couple months ago and is still rehabbing. He's in quite a bit of pain still. I have not treated this person before I was actually playing basketball last night and I saw him there. Hopefully he will be making it over here. After that I will have a bottle that we will be using and treating on so that you can observe and watch how the treatments work. One thing I recommend is during your break if you get fingernail clippers or fingernail file that you grab those because you want your thumb nail to be nice and short like this because we will be pushing with the tip of the thumb into the tissues and the shorter the thumbnail the better for the patient. You don't want to jab your thumbnail into hem. If you look at this image, it's the image of the fascia. Some of you have heard he is an anatomist and does videos of the fascia. You can see already the fascia is three-dimensional. It looks like it has drops and it may be in a liquid or solid state. It's very complex. It's all sorts of patterns and directions and it's a multi-connective tissue. We will first go into that but let me give you the agenda. The first bit we will go over fascia and how it distorts and what conditions does the SDM treat and we will go into recognizing it.

I did my residency in Georgia and Fort Gordon, Georgia. Then my now I am here at my duty station. That's a little bit about where I've gone. Of course any food in Texas you will get good Mexican food. I'm a big sports fan. I've had a rough play out this year. One of the things as we do his you'll see that FDM is based off of gestures and how the patient is demonstrating the pain. It might be two fingers into a soft issue area or a line. It might be holding the joint. You will be using observational skills to get the diagnosis in FDM. That's what I love about it. The patients are running the show. Sometimes we go in there and we say have my plan figured out. This is really to go in and the patient directs everything you are doing based on how they are starting with how they are demonstrating pain. In sports you might see how the players when they get injured they may hold their arm in a certain way. I remember holding his neck like this. When his injury happened this year. He had some shoulder injuries. And those gestures that they do specify a certain distortion. Today we will be able to do those tools you can recognize what that is and you will know how to treat it. The treatments are fast and effective. And they work a good amount of time. It's a great tool to start with. And so sometimes when you are watching sports I say I know what they have. We could treat them and get them back in. That's just the competitive sports fan that I am. This is an international certificate I received in the FDM in the fascial distortion model. I received it before COVID boomed and hit. That is Matt Booth on my right and Jennifer my left. She was the president and both of them are instructors in the FDM Academy which the group that teaches the modules, the three modules throughout the U.S. And so if you see my thumb it is bent this way. That is how we treat in FDM. We treat with our thumbs and the distal joint on the thumb. S that it actually is better for you as you are treating and it provides a surface

area we get into. The final exam that you need to pass is to take this picture with your thumb that like this. If you do it like this they are saying sorry. You have to do it all. It's a good group of people and they are intelligent. FDM has become a global treatment method and global model. It's big in Germany and Japan and Europe. This is myself and Matt Booth with a class in Boise, Idaho. We are teaching this June I believe. And so once I became certified it allowed me to teach FDM at an international level.

And you can see we are giving that great thumbs-up picture at the Boise College of osteopathic medicine. Anyone can attend these and is interested in attending. There's a military discount that comes along with it. Here's my family. The three boys and my wife Lindsay who will join us later as a model so we can treat her and demonstrate some of this treatment. This may have been for the Fourth of July. We like to grow our own food. We have an herb garden there.

So let's get started. Let's start with the video. I will try to get make this as seamless as possible. I will share my screen. And show this first video. So hopefully you can see the video. I asked her to show me how it hurts. She said it hurts when I raise my arm and then she is showing me where it is hurting. She's using the tips of her fingers and goes down her shoulder and up to her neck. When she gets there she starts pushing multiple fingers into the soft tissue area. Right there into that area that a lot of us probably had before. You can see on her face she's in a little bit of discomfort and she's trying to raise her left arm. You after a quick treatment you can see the look on her face is that she's doing pretty well. She's raising both of her arms straight up and touching them both together. I asked her if she's in any pain and she shook her head she was not. And then she's kind of showing this is where the pain was. I'm going to come around and show what we did. So you can see my nail marks. This is the beginning when I was still not cutting my nails as short as I could. I first did what's called a trigger where I pushed and went all the way up her shoulder and I push in certain areas. Where she was demonstrating her pain with the pads of her fingers where she pushed in. Those were herniated trigger points. We treated both of those. We got her pain back down to zero. And her range of motion was restored.

We will go ahead and wait to get the document back up. Hopefully you were able to see that. If you could comment really quickly. Were you able to see the video? I know there was no volume so I narrated it. Okay. Good. One thing with the FDM as some people might say was too good to be true. You are blowing smoke. And you have to give it a chance. If you give it a chance and you start thinking in the model that is what this is. It's a way to think medically and not necessarily a non-inflammatory way because inflammation plays a role. It's a way of thinking that the fascia has been change anatomically in some way. And if we think that way and we try to manipulate the fascia back, often times we get pretty quick results just like with this patient where the range of motion is restored and the pain goes away. Some may say how long will that last? It depends on the patient and their tissue and how it responds. Often times it lasts quite a while. If they are more chronic than it will likely be a little bit longer or it will be they may need a few more treatments. The fascia has

memory. The fascia can often times go back to that power. Then if the tissues are in poor health, back in mean that they will be more likely to return. I talked to the patient about do you smoke? Do you use tobacco? What are your eating habits like? Is your diabetes under control quick that's a great time to say look where we've gotten you. Right now with this treatment and I can tell that your tissues needed to repeat this over and over. The tissues don't feel very healthy. We may need to treat you over and over but one thing you can do is get your body healthier. You can talk about the diet and tobacco and sleep. Those different things to help encourage them to say you will be doing your part as we get you feeling better. One way you can tell is after you treat them let's say you treat this and we will go into what that is. Let's say you push in there and you feel it's almost like you have this under your thumb. You push down and you get squished. So that's a good response. Then let's say there's a big crater in the skin. So let's say you pushed there and now there's this big crater and it doesn't really stay like a normal tissue and it is boggy and perhaps more like what you would expect. That would be what the tissue would feel like if they are not healing well.

While we are waiting on that, just one recommendation for you. If you could find someone and I would say in about 1.5 hours from now so about 3:00 p.m. your time if you could have somebody ready for you to practice on. So take a moment may be to pull your phone up and text somebody to ask if they could come over to practice the treatment. That way you can get a little bit more practice doing it. Especially if it is someone who has any sort of pain that would be helpful. Perfect. We've got the slide back. Hopefully you all can see this. Can you see, I believe okay? So normally you look at this and one does not simply and then you fill in the blanks with something. Like a common one for us in Utah was one does not simply drive on the freeway without going through construction. Or one does not go through over this mountain in El Paso without construction. One does simply get rid of pain with this module. With this model. Let's go into the fascia. The fascia is that connective tissue that surrounds our entire body. It's the largest organ in the body. This is a dissection of a sheep done by a doctor and his daughter in Alaska. He's one of the other FDM instructors. They share this video that they were butchering and they saw this beautiful fascia. You can see how it is quite complex. One way I like to explain it to patients is thinking of an orange. When you peel the orange that white tissue that is around the orange is like the fascia. But when you open it there's division for each that is more fascia separating and dividing it. Our bodies like that in a complex way. Also it travels and it's one over the entire body. And it surrounds every cell. And it communicates between the inside and the outside world. So under tension and it supports all of those structures bones and ligaments. Where basically the third picture here, the man with the rubber band if he had those sticks sitting there, it would just be a pile of sticks with all of the tension and the system with the rubber band that is able to stand up. That is a lot of what that fascia does for us. It contributes and supports all of those structures so that we can stand and move. If you look at that first picture on the far left, the pole in one area can have a downstream effect. If you think of like grandma's old sweater. You pull on one end and you get this run all across the sweater and you're like what happened? Something can happen like that when you have injuries. It can have a linear distortion a

linear change that can result in pain and a decrease in function. This is by Dr. Gil Hadley. It's a dissection of the fascia on a cadaver. The image on the left is the fascia obviously not all of it because if you think of the fascia going between bone and everything. This is mostly the outer fascia that goes around every individual. Zooming in you can see a continuous sheet extending from head to toe. You can see that it is the largest organ and it is very complex and very important in how we function.

So looking at a cross section of the fascia and how it is supported, you can see how with all of those different muscle groups and the bone in the middle, it is allowing the muscle to perform their function within their plane. And you can see the blood vessels and nerves are running through the fascia and it is really quite complex in any given area of the body. Again remembering that three-dimensional area. Not only is it supportive and contractile and allows us to move and slide and glide. But it has sensors. So going the founder of osteopathic medicine and trying not to read quotes but this one is important. He was a head of his time with fascia. He said being principal that permeates, divides, and subdivides every portion of animal body surrounding and penetrating every muscle and all its fibers every artery and fiber and principal. So the fascia is sometimes underappreciated. Recently we could probably spend four hours talking about fascia. I will confess I am not a major fascial researcher. I've done quite a bit and published in this field and what's interesting is we don't know a lot. There's a lot we don't know. Interestingly and recently they found that the fascia can weigh up to 12.5 kilograms and have over 250 million nerve endings. As opposed to the skin that has around 200 million nerve endings. And so it is in fact the richest sensory organ we have. It's why it is able to be the major communicator between the outside and inside world. Those sensory's are not just mechanical. They play a major role in the way we perceive the world around it.

This reminds me of a story when I first learned about this in my second year of medical school. There is a doctor at Des Moines University and he was a physical medicine and rehabilitation physician. He had a patient and we were seeing this and it was. And we probably all seen that. And at one point we had patient like that. I was thinking they probably have severe limitation and probably have all sorts of problems and so he was telling me the last treatment he did went well and the patient had restored full range of motion in the patient was coming in that day showing us he had no limitations at all. The range of motion was still 100%. He had no pain but he was walking around and so a lot of times we blame symptoms and pain on what we can find in imaging or on the muscle and this is torn so that has to be the reason why your shoulder hurts when in reality going back to the nerve endings for that injury are in the fascia. There may be a few in the muscle but the fascia is the major network that sends signals to the brain. And so once he was able to iron out those distortions the patient was able to continue their increase and without any limitations. And whenever I talk to patients and I'm sure if you do the same in the end that's what matters most. They want to know the function with less or limited pain. And sometimes and it might be the language we are using and it says hey you have a torn muscle or rotator cuff. They grab onto that and feel like I will never get better because

it's torn because unless I go and have surgery. Surgery is not always the answer. At least for what you want is they want function without pain. A lot of you may be thinking back to in the ASC they publish this. There was 1000 folks and they are all asymptomatic and a lot of them had herniated disc but they are walking around without symptoms. And so when we get an MRI and we see that there is a finding, sometimes we blame that as the culprit or the source of the pain when really the fascia is inconspicuous. I just wanted to put that out there that if you start with the fascia you will more likely get to a better less invasive way you get to a better outcome. There are times where we hit a wall and a barrier. This is a better way to screen them and give them outcomes they are looking for. This is an article talking about the fascia and you notice it follows a lot of the same laws that bone follows. Basically if you put an amount of pressure on in will move in accordance to the amount of pressure you applied. We now know that fascia will be moving and pliable. They also know if you had too much it will get to a breaking point where it will no longer be able to accept the load and stress injury will happen. And it follows electrical laws and some of you may have been looking into that. And it's a major communicator. One of the things they said in the article and this is so important and it ties really well is the fascia acts as an inducer for mechanical and electrical events can a communicator between internal and external. If that major communicator. We know this transmits mechanical and electrical things. All medical surgical rehab engages in property. And how we engage in this. They said if we harness these it will improve the diagnosis and provide options for treatment. And so that is so important. Are diagnostic skills and options for healing will go up significantly if we think in a model?

Let's go ahead and check our knowledge check. Let's bring the first poll. Let's take a break and think on this. Let's see if we can get this pulled over. That is a different question. It should be number one. Mostly because this is pretty basic knowledge we are going over. I want you to be thinking a little bit about it. But yes go ahead and put your answers in the chat box. So it's a double negative. You all are way too smart. That's it right there. You probably may have been in school where they were allowed but it's not anymore. You are right. It's the largest organ and there are the results. Let's go ahead and remove the poll.

It's the largest organ in the body. It has the most sensory receptors. So let's carry on and we will dive into articles on that model before we start teaching it. So interestingly it has not only memory but the awareness who's been able to anticipate in preparing itself. So the fascia is quite remarkable. I want to note the biggest thing is that it has memory. Some patients may need more treatment. What I like to do is teach the patient how to treat themselves. That works out quite well. It empowers the patient and allows them to feel like they can carry on with those benefits without requiring further appointments. So this is a study where they look at that normal individual and versus autoimmune diseases. What we are showing here is that this is a nine year old boy and you can see the x-ray on the right you can see the arrows are pointing to the fascia that was calcified due to the constant inflammation. The first images you can also see some of the swelling and changes as well. And what they know is in a normal individual it is quite inconspicuous. It's not really discussed or mentioned but it usually blends into the

background. This is pretty important in MRIs and getting imaging. I am usually a little slow on getting imaging. It doesn't change my treatment. It's interesting on this that number one the fascia is not very visible on a normal MRI. So this is Stephen, he formed the fascial distortion model. He went to medical school in Kansas City in the osteopathic medical school and graduated in 1986, then I was born. And he practiced in California when he started in 1991 he identified one distortion and started making a worldwide model that had been accepted in a large part in a nation center more outcome based. Their healthcare is more tied to the government dollars and they are trying to find a way for people to get better in a less expensive way whereas perhaps in our healthcare system he had his hands wrapped around the healthcare system. This model has been growing ever since and it hopefully will continue to grow because it's the potential for improvement.

It's an anatomical perspective. That's the first thing to think of. It's a mindset and framework to approach the patient in which most injuries and certain medical conditions are envisioned. They are envisioned as consisting of one or more of the six principal fascial distortion types. Each with the clinical presentation. You may think like medical condition are you sure? He was doing a lot of work in his later years before he passed away in 2006 where he found that there was a lot of distortion things like kidney stones and all sorts of things that I don't venture into treating but he was finding he was treating patients with those conditions and they were getting better. One condition I am working on in a case report we had a patient with multiple sclerosis. I don't know if any of you are familiar with MS hug but it's a restriction around the trunk and it may feel like they can't get a good breath in. It's very restricted. And a lot of patients with multiple sclerosis deal with that. What they did in treatment is we applied that model and treated the patient and she got better and not only that but we were able to teach her how to treat herself at home. She just treats herself at home and goes along without any feeling of restriction. We get into what we did with that but we treat with cylinders. That's one of the six distortion types. She treated herself with cupping. We can get into the way she did that later as we get into the distortion.

At any time if you have a question about anything and if you want to slow down or speed up go ahead and put that in the chat box. It's an anatomical perspective. What about the key tenants of the V.A. distortion model. Patient intuitively know. They will be pushing on an area and say its right here. And the body language is pushing on it because they are telling you what needs to happen. It needs to be pushed on harder and in a different direction. With a finite surface area to get to where it needs to go. What's amazing is they are communicating this with the consistent verbal and body language which is the bottom right key tenant which basically if you are in Germany or Japan and it doesn't matter where you are you will communicate using the same descriptors for each distortion. For example a herniated trigger point which what was shown here. Let's say they're putting their fingers into the muscle. That is the body language. It doesn't matter where you are from that's the way you will communicate. Case in point in Germany is they publish this book called the FDM manual plus. This is done by the MS DMA and what I like about this book is it just is pictures. And so I can kind of show you a

good picture. This is a picture of him showing you how the patient may present and then for this distortion type. We used across the entire world acronyms like FD for folding distortion. There showing you what they might be doing with the systems and then right here it demonstrates how to do the treatment. What I like about this is that it's a German book but there are no German words in it. It's just pictures and demonstration on how to do the treatment. If you want we can put that in there. FTM manual. It comes in the electronic version and you can have access to the content on your phone. The system of knowing and communicating that is universal. The fascial will communicate every time it has distortion. It's unbelievable. If it did not do that it would not work. It communicates points in the same way and now because of that we are able to apply this model and make a difference.

Here are the six distortions. I will briefly describe that. You may have seen this one. Maybe I will do this or maybe you are concerned about this. Maybe you will get a finding and maybe you go through surgery and you don't get better. I've had a few patients like that. It's just a trigger band and a quick five minute treatment. And so trigger bands are quite common. Some of you may have had them. A common one goes down the arm and up the back of the neck. Herniated trigger points that is where - a trigger band is a twist or separation of the fascia. Herniated trigger point is think of something pushing through and permeating through a plane. Often times you can feel it as a bump demonstrated with two fingers or three fingers into the soft tissue area. And it usually is a deep ache. The trigger band is a polling and burning pain. They have certain areas where they're located. Why don't you let me know if you had a patient for yourself or you demonstrate your pain right here? Transverse process of the thoracic spine and the scapula? Who has had that she had a patient with that? Elizabeth Walker says yes. Anyone else? Yes. It's a very common spot. The reason I bring it up is because the herniated trigger points show up yes I've had it and had cases with it.

It's a very common trigger point. We will see as we go along that these trigger points show up in very common areas. This area of course you have it in the buttock area on the lateral side of the hip. So right here. You have the deltoid herniated trigger point. This is usually smaller but usually two fingers. And so these can show up in quite a few places. What I found most often is the rib. I like to blend that model and often times the distortion is in the rib go hand-in-hand back sometimes they will pop the rib and come back two or three days later and say feels better. That's where I started doing both. I often used tissues to describe that. Let's say you have two surfaces trying to glide. You have a herniation through both of them. If that happens and you try to glide away from each other it will cause problems on other structures nearby. As you are trying to glide through and you have that you could be putting stress on that bone. It could be bowling that rib into a posterior position. Which one is the chicken and the egg? I don't know. I don't know if it matters. I usually treat them both. That's a great observation. So a continuum distortion is on a bone. They will point with one finger. At the transition of the bone it is put away. We will go into that a little more. Usually we hold and that's where it is accordion and in. A distortion is superficial fascia that goes anywhere. On the arm is a good way to explain it. Think of a slinky going down the arm. And so one way

to treat that is to squeeze it out or use cupping and double thumb. We will go into what those are and then the fixation is the fluid and the joint space isn't able to fully go around. You will get a tight joint may be bone on bone and it feels like it needs to pop and then they will have some increase in range of motion. There are a couple ways to treat it. One of which is to inject with some substance to create space. Another is to pump their own fluid through there and so we will get into that. That gives the brief introduction and we will go into each of these in a more detailed way. They are manifestations. Each of these has its own distinct manifestation. The patient will show you which one they have by their body language.

What can the FDM be? As we go through this, I will show you pictures. I want you to look at the patient's hand. One question that we need to ask an FDM is for the patient to show us how it hurts. It's a different way of asking. Instead of show me where it hurts instead of where it hurts I like to ask show me where it hurts or show me how it hurts. It's usually in some sort of movement is when it hurts. Then pay attention and what are they doing with their hands. He's got a headache. Those hands may be telling us he has a folding or some herniated trigger points and that is for the headache. A common thing we treat a bit is joint pain. He is showing you here and putting his fingers into that area. That may be a sign of herniated trigger points or is he sleeping his fingers down his jaw and that may be a trigger band. On that note with the TMJ. I see that quite a bit. I've had pretty good success with it. What do you typically see? It's often different for everybody. Sometimes they have a continued distortion on the bone and a trigger band. Sometimes they cup it and hold it and so often times it's not the same. That's why it's important that the patient directs that. The next time is in the neck. She is demonstrating that she is showing that. Shoulder pain she's holding that shoulder. Low back pain. In this case there may be one holding the back. Hip pain again depending on what they are doing it could be different pain. It could be a herniated trigger point. Side pain, thigh pain, knee pain. Very common in knee pain. Hopefully I will be able to go over examples of how you might treat that. Shin pain. Often times continuing distortion. Ankle pain, foot pain. If you notice we went from head to toe. Pretty much FDM can treat anything from head to toe wherever there is fascia. These distortions can show up anywhere but as you practice you will start picking up patterns of where you will see it and how they show up.

Before our break we will go through a little bit more of how these distortions might happen and how inflammation plays a role. This is a journal of sports medicine article on how the fascia is responding to injury and basically to break it down for you it's we've got this inflammation marker and a lot of times it goes down and eventually in tracking the nerve and relieving that and so the nerve entrapment where are the nerves running? They are running through the fascia. They will be entrapped in that as there's more inflammation it gets more calcified. With all that it gets calcified and eventually those nerves go through there. Now there been changes to a normal anatomical structure. And so again thinking on this image when that starts thickening it may result in some of that blood flow can get some swelling. You are giving continued distortion so pulling or pushing that into the bone. And so there's a lot

of different ways. So here is that basically they took a group and they had that lumbar fascia and took another group and they did nothing. They had the increase in peptide and it eventually leads to collagen disposition. And so that is one of the potential mechanisms for why these distortions show up. I say potential because we haven't studied this. It might be difficult to do that. You would have to dissect someone alive and see if their fascia could do that. It's a growing field.

And so let's check our knowledge again. So which of the following is not true. We have that question pulled up. You are correct. Inflammation does play a role in the distortion of fascia. It's another double negative. And B is the correct answer. It is not true. If we do understand the fascia we can improve the field and ability to help patients heal information does play a role. It plays a trigger point in the same way. According to FDM the musculoskeletal conditions are visible and one of the distortions. Thank you for the poll. Let's from here take a break. Everyone stand up and stretch. After this we will go into the research that is specific for FDM and from there we will go into teaching you about FDM and how to use it. If you want to give me a comment if I'm talking too fast or if you have any suggestions for how we can improve let me know.

Welcome back from the break. Having a few difficulties. I kept getting kicked off. Hopefully you all had a good break. So let's get into the research and so as we are going through this I put this to the beginning to tell you what is a significant change in the VAS score. It's the visual analog pain scale. It's usually 100 points. What they normally do is put it on a piece of paper. The patient marks it. And so it could be anywhere along that scale where their pain is. And usually we use a 10 point scale in the clinic. Most research will use a 100 point scale. Unfortunately in something like FDM there's not a lot of studies that have findings. A lot of times there are surveys or analog pain scale which is a patient reported outcome and not necessarily an objective thing that is measurable. And so there's a little bit more biased because it is subjective. A lot of these studies aren't necessarily high powered. But they all do together demonstrate the effect the FDM can have. If you look here at the VAS score for these conditions if you change that by 11 points which would be like one point on a scale. That is clinically significant. So this is my first article that I published back in 2017. This is a patient I treated. This is after I attended one lecture on FDM. In one lab at Des Moines University. And what he demonstrated was basically like he couldn't shoulder and he had MRIs in physical therapy and injections and all sorts of different treatments and wasn't getting better. And so he came to me and showed me that he had a herniated trigger point and trigger band. I treated those and he went from about 90 to about here. If you could see the camera it's about halfway up to full range of motion, about 135. I wasn't sure what else to do. A patient from their demonstrated pain like this. He was holding his shoulder. And I was like I couldn't remember what that is. Just so you know when the folded this joint I wasn't sure so I went back to him and I said he treated him and he got better but now I don't know what it is. And they said how was he injured? And I said he's holding a rope. He got pulled behind him from the rope pulled backward and now he is holding his shoulder. The pain where he drew the line and pushed him no longer has

pain there, but now he's holding it. He was like that's folding. And I said how I treated? He said it's kind of barbaric and I said what? I still remember this meeting. He's like it's barbaric. I don't know if I want to do it. Its safe let me walk you through it. Basically with a folding you want to take a joint and push it or pull it in a plane that is no painful. It's often a reproduction of the direction of force during the injury. That is the key point with folding. What was the direction of force applied during the injury? That's what you want to re-create. Surprisingly it's less painful than going in the opposite direction. If you had a compression and compressing will feel good. Folding and distracting will hurt. And so with a folding I basically laid him on the table and took his arm and yanked on it a couple times. When I got it to a plane that was non painful. About three or four of those yanked and he went like this and he got up and went all the way up to a full range of motion. He still had like of those muscle groups where he could do that they were definitely atrophied on that side. After this case, I was hooked. To be able to make an instant change to hook me and from there on I have been learning FDM is much as I could. This is the potential change you can make it immediate and impactful.

A lot of these studies will be gone over today from your pic this is from Germany. If someone reads German and would like to translate it for me and this is basically a study where you took patients with frozen shoulder and it was 60 patients and they don't really disclose how long they did the treatment. In the two groups one group was getting a manual conventional manual therapy demonstrated that was 10 points. That's pretty close to significant. With the range of motion about 25.9. It's pretty good. Compared to the FTM group which is demonstrated to improve by 21 points by the back scoring 59 points in their range of motion. This study they use the word effective where you need more research and power. But they are saying that FDM was superior in this study. And they compared it to a manual therapy. The gap in my opinion would probably maintain. This is a study on the soft tissue and patients of shoulder pain. This is a no inferior study. We looked at the Colton born evidence method that was basically some soft tissue constructions. And nothing like techniques. And so with both groups they had significant improvement in range of motion. And the only difference was the group had significantly better external rotation. Internal, external was improved. In this study they are looking at three groups of 90 patients in each group. This was for cervical spine and neck pain. What they showed was that the FDM and other group bulk after one treatment it showed significant improvement in range of motion, mobility, and neck pain. Again it was less than 100 people. 30 in each group. The control had no improvement.

We could spend more time going through these studies. I'm giving you a brief overview of these so you have more time to go over the actual treatment. If you want to go over these more with the PowerPoint you can look up the title here. There is a link and you can easily find these.

Here is a low back pain study. There's about two or three low back pain studies on FDM. Here they compared the German national disease management guideline compared to the fascial distortion model. It's physical therapy and mobility and a little bit of strength basically physical therapy

guided treatment. And so what they had was it was the mean age nonrandomized for 12 week and the outcome they were looking at was the VAS so the pain scale the patient diary and function basically surveys on how the patient was able to function, there pain scores and their medication use It wasn't a very big and back. It was 38 and 39. And so you can see that it was leaning a little bit toward FDM being superior perhaps if there is a greater and it would've showed up. And here is the change in the score. The treatment is the FTM group. The blue line is the national German guideline group. You can see the pain scores maybe in the first week are for seven days. From there they pretty much ended at the same point. You can see in this one this is the NSAID group a significant drop. Compared to the German group but still in the and at 12 weeks.

This one study which is an Italian study again looking at low back pain showed smaller ends looking at VAS brief pain inventory which is a survey, self-reported survey on how they are doing with that and then this disability questionnaire. They had 12 in each group where the manual therapy versus the Fascial Distortion Model treatment and in this case FDM was superior compared to the manual group. Yes, a lot less visits versus PT. That is exactly how I use it. My physical therapy folks I went over there and show them what I do and showed them what to expect and what I like to put into my therapy request. And often time it's just to help maintain the improvement we made with FDM and then find any deconditioning that the patient may have whether it is from or whatnot and focus on that and help them get more equal if they can. But absolutely. PT has noticed and lets me know that I am sending them less patience and then the ones I am sending aren't taking as long with PT. Here's a study on the Cobb's angle. They did about eight treatments and I think it was about 14. This was a Korean study. I think it was about 14 individuals. And they did eight treatments on them and found that because the Cobb's angle improved by an angle of about 5.7 degrees with the range of 5 to 15 degrees in total change. And so it's pretty impressive to build a change in the Cobb's angle.

Here is another study, a small one with hamstring tightness. What they did and they probably all done this is to sit and reach and so they had 30 individuals and they hit a pre-stretch where they reached out to see how far they could go. They had one FDM treatment and did a post test. In this case what did they find? In improved by 15%. That's pretty significant in the hamstring mobility. If you have a patient who has hamstring tightness, this is a great treatment. Basically it's taking the tip of the thumb and pushing up the hamstring and that is something that you can do. Normally all of our treatments are guided based on the patient. Where the patient is showing pain when they try to do a certain activity. In this case you could certainly just do a hamstring trigger bad even if they don't show anything there. If you want to help them improve their hamstring flexibility. So here is a German study for media tibial stress syndrome. It service members so they had 32 service members with shin splints and all of them had symptoms for at least 8 1/2 weeks. For an average. And for treatment average or until better. Basically they treated them four times or until they got better. They only did a 10 point pain scale and so on average the pain went from 52 to 11 or 5.2 to 1.1. Going back to the pain scale we know that significant. Three were

pain-free after one treatment and 53% were pain-free at the end of the four treatments. They all went across the board and they had significantly improved running and jumping and other mobility type of movements. We move into the foot so we worked our way down. Pretty much after all this you will be FDM scholars. We are showing you everything is. This is an ankle study they did. They had 19 and they were treating them within four days of the trauma. It's one treatment. After one treatment 13 were pain-free after that one treatment, three had little pain and they all on average had improvement in their dorsiflexion by 7.9 degrees. That was objective and then also the no pain after treatment was pretty significant.

There are studies in the Mayo Clinic. We may get more information coming out on ankle trauma as we move along. If you think about the implications and how going through different studies how these can be applied in the military and all you need is this and you don't need all of the other fancy equipment you can be quite an asset to military medicine. This is a study I published last month I guess it's two months ago now that is September. It should be not online anymore but also in print. This is a study I did back in presidency. Looking at this it's a treatment and its plantar heel pain and plantar fasciitis and looking at the sole of the foot there's quite a bit of fashion there. This is an illustration we had an illustrator draw for us at Fort Gordon demonstrating what some of the distortions were in an exaggerated fashion. You can see the far left trigger band getting twisted are separated and the herniated trigger point and the continued distortions which is one of the most common findings in the plantar heel pain population.

What did we do and we got a bunch of data and found out who had it. They had to be between the ages of 18 and 65 and active-duty. We treated them twice. We treated them day one and day seven. Before each of those we gathered all the data. Questionnaires, VAS and we measured their fascial thickness because we looked for the objective and we look for the NSAID use. We only got the fascial thickness by ultrasound at day one and four months. And we treated them a few times day one and day seven. These were outcomes we are looking at. It's a validated questionnaire. It's a pain scale and profile status and NSAID use. The questionnaire is validated and gives you certain minimal clinical significant changes that you need in each of the eight categories. And we had the plug this into software for you to get the number. You won't know the result by just looking at the answers.

Foot pain going up is improvement. And what you need to be significant as 40. Foot function is 11 and general foot health is nine. So in foot pain you want at least 14 different. We got 32 two to 68. In the Delta there foot function also quite significant change, 52 to about 80. In general foot health, 48. And all of those far they are minimal changes you need to be significant. Physical activity even improved as well. The validated study on the FH questionnaire did not have a look at physical activity. Then the pain scale remember that we said was significant. 11 up to 30 and in this case we had a Delta from 71 until 28 after one treatment. That lasted about 2 to 5 months. There was one significant change statistically from the second and third visit, then from the first. Even though we only treated 50 feet and it ended up being 28 individuals we

still had a large value. Then we looked at the fascial thickness. Baseline was 4.4. Anything greater than four is diagnostic for plantar fasciitis. If you look at the image you will see that shiny white bone in the middle of the image on the left you can see the thickness on the bottom left is .53 centimeters. This patient had pretty thick fascial you can see his fascia is dark. A good image means you get the fascial all the way through the entire imaging. You can see where we are measuring that is the fascia going over the calcaneus. At four months it went down to 3.8. He went from diagnostic to non-diagnostic for plantar fasciitis. Within a really good P value. Not only were we making subjective findings but objective findings to support FDM as useful in the treatment of plantar fasciitis. And then profile. The average duration profiles for 17 individuals was 670 days. Can you imagine two years? Some of us here may have had this and may be on profile and may have seen patients for this. We were able to get 12 of those 17 back to duty which was pretty significant considering what they had been through. Most of them, actually all of them had splints and were taking an NSAID and quite a few had received injections and PT and some had the greater frequency of ablation and shockwave therapy. Quite a few had shockwave therapy. They were still with significant symptoms. And then NSAID use we decreased that from 27 until seven.

So let's go ahead and check our knowledge. That is the end of reviewing research. We will jump into more of the FDM learning. Let's go ahead and pull this over learn to love the pain you will that's because three of the treatments are painful. They hurt but they do not harm. We will go into how we approach that with a patient. Let's review this. We are asking good questions. Which of the following is correct or I should say which of the following is correct. Let's pull that over and see what you think of this question. Perfect you all got it. The research is limited with FTM but there are several small studies which we reviewed that support the use of FDM. Any questions at this point? Go ahead and drop them into the track. Any questions or comments I'm happy to field any of those at this time. Before we move into the nuts and bolts.

So the star-shaped pattern at the hip is that into. So usually when we say the star we actually call one of the bands the star band because the star of the show is one of the most common. It's actually the band. It goes from the base down to this spinal down the back. That's a trigger band back and start from the sacrum and go all the way up. But really Elizabeth, when you're looking at how the patient demonstrates that if they are saying they have pain and they move the hip around and say I feel like my hip is really tight in the joint. Maybe it needs to pop and they are not really using their head but they are saying those kind of things and they say feels like bone on bone, that is the description and gesture to explain. If they are using their hands and pointing let's say they are pointing to that spot, we call it the bull's-eye. Right there. There pointing there with two fingers, that is called the bull's-eye and we call that the bull's-eye because it's a really common herniated trigger point. I usually treat that in most patients even if they are not showing it, but if they have back pain I like to add that in.

Remember that herniated trigger point that we were talking about earlier. The one along the medial border of the scapula where you may point with

two fingers and it may be hard to have two hands and maybe sometimes you will have a patient say show me because they can't quite get to it and they will point on you with two fingers. May be in between ribs five, two, and seven. So he was at clinic one day and he had a patient come in with that pain description and he did some OMP and the patient is like I am not any better. He was like I've kind of done everything within my toolbox to help you out. He said I'm sorry why don't we come back and see if anything happens? Then he had another patient come in and the exacting happened. He treats them and tries to help them out and he ends up not getting any better again. This happened again and then finally the fourth time when a patient comes in he said I've tried to treat this several times. I haven't been very successful. I'm not sure what I can do for you today. The patient says it just feels like it needs to be pushed on. Could you just push on it? That's what feels like needs to happen. He was like okay. I guess. Let's try. He is pushing on it and the patient is giving them feedback like that's the spot. Keep pushing keep pushing. And finally he feels a sinking under his thumb like he squishing a grape and it sinks in and the patient's like that's it. That was this spot. Then he gets up and moves around and says you know what the pain is gone. You've got it. He's like what? What on earth did I just do? I have no idea what we did. And so that got his mind spinning like what could this be and eventually this distortion model and that grew as they found more and more distortion. And who knows. Maybe there is distortion we are not sure what it is yet. He wrote several articles available online. He also wrote a book. More in a PDF style. That is actually in your files. Part one, two, three, four of FDM clinical and theoretical application. You can download that. That's his original work. And there's a tree with an egg corn on it and that's the sign you use for FDM. He describes how he teaches it for several different things and goes over case studies and it's a pretty amazing piece of work. That's the latest version I think version 4. And so that is available to you. So he goes on to start these. But by then he'd already started this model and it has continued to progress.

Going back to the original definition and anatomical perspective. The biggest thing is the mindset and most of those conditions have one through six of these different distortions. There are the key tenants. The patient knows what they need to feel better. Remember that patient pointing in there and this is how it hurts. That's going to be universally communicated across the board. That is inherent in the fascia. Those are the key tenants that allowed FDM to work. Here are the six principal distortion types. Remember we will look at how they demonstrate their pain and what are the manifestations and what are the gestures they are using. And remember when looking we won't be able to look at the fascia. Maybe that's the trigger band and where that's perked up. We don't know what it looks like because we haven't done any studies with manipulated fascia. That's pre-and post-section. The tool of choice is the thumb. If you haven't already go ahead and get your fingernail clippers and your file and file down your thumb. We are getting close to treating each other. Or treating ourselves if we don't have anyone nearby us can treat. That is the main tool for three of the treatments. From there we branch off a little bit more. If you have that it's really all you need to do most of the treatment. There are a few things wrong with this picture. You might look at it and see that the thumb isn't that the

way it needs to be. It needs to be flexed at that joint. At that distal joint. But the idea is that downward force and you are pressing on that herniation and you are trying to make change in the fascia. Sometimes you have to press pretty hard. I like to tell patients that this hurts but it does not harm you. Our language is very important. Our language is so important with what we say to the patient. We tell the patient that they have degenerative joint disease and they have herniated discs and tears and all of these ways of saying it. That can often result in them holding onto that and that becoming part of who they are and they feel like they will never get better. And so one of the things I try hard to do is use words like condition which means it can go away. It's something we can treat and I like to explain a lot about what the fascia is. Let's go into the contraindications.

These are all relative contraindications. Just remember that. There are no absolute contraindications except one. And that is poor patient rapport. The patient is not willing to let you touch them and you don't have a relationship at a place where the patient will allow you to put your hands on them and a way to treat them. Do not treat them. I had unfortunately an experience and I was going through a day where we were helping a lot of people in the soldier clinic and having great results and another soldier comes in and she was dealing with a lot of emotional and mental health issues and had chronic low back pain. And I went through it very quick and asked her if I could treat her. She was hesitant and I eventually convince her to say it was okay and that backfired on me. She later wrote a comment and felt uncomfortable with me and from then on requested that a chaperone was in the room. Whenever I was treating her. And so I learned from that experience to make sure I have a really good patient rapport and if the patient is ready and willing and interested in receiving the treatment. Some of the relative contraindications if there is an active infection over the treatments that you might want to be careful with that or wait for the infection to get better. Obviously a wound or something like that it would not do either. If they have a bleeding disorder remember some of these treatments may cause bruising and so you could bruise them or cause them to bleed pretty badly. I have treated several people on blood thinners. Most of them were pretty happy because they got better, but they weren't happy about the bruising that came afterwards. You really have to again have a rapport with the patient where they are okay with quite a bit of bruising. Obviously if they got aortic aneurysm or a preference of viscous. If they have cancer or metastatic disease be careful working at or near a site where that cancer is. I did work on a patient who had breast cancer who had a lymph node dissection and her arm was just puffy and full of fluid and huge and had a negative ultrasound for no DVT. She did have active metastatic cancer in the liver. I just asked her where her and she said right here. And so that was the deltoid herniated trigger point. I went and treated that and squished it in and it was a good reduction of the herniation and the next time I saw her, her arms with the same size. She actually came and gave me a hug. So again going back to how fascia can play a role in the flow of fluid often times it could be something just like that that is preventing the fluid from mobilizing. It's not an absolute but it's a relative contraindication. A previous stroke, current DVT, edema or hematoma. The study they did with the acute sprayed ankle there could be swelling. If you are not able to

get to a tissue depth where you feel like you are making a change you may want to consider that. Of course if it's hitting edema and the patient has such significant edema I would wait. And then pregnancy when treating the abdomen or pelvis. This is if you are not comfortable with it. There was a study that was published or I think they are still working on it. They were treating a patient who had ligament pain but it turned out to be some fascial distortions and they were about to publish that case report and how her pain was completely relieved.

Some of the side effect. You can see the trigger bands can cause bruising. You may want to let them know there will be a good red mark here. Or some bruising. The copying when we talk about cupping. You don't really want to get to the point where you are leaving those petechial there. That means you put the cup on too hard. The cup does not need to be on that hard. The idea is not to bruise them with the cup and to un-wrinkle some of that. We will get to what that looks like. Also the treatment. With these we don't use any lotion. We don't use any oils or anything because what we need is that heat and the friction. And to demonstrate that if you have a trigger band like this let's say it is separated. It will form new cross-links to keep itself in this position. That's one reason why we say there's memory. It stays and there is a cross-link and you need heat and friction to break those up. And so the if you put anything over the skin and takes away some of you can produce. The only thing I recommend after treatment. He can bring it back otherwise ice is okay if they want to reduce the bruising and the biggest thing is to move. There is no restriction in mobility. The old rest, ice, compression, injury. There is no evidence to support that. I tell them just to keep moving and use good form. If you can tolerate it go back to activity. You be the judge on what you can do. And that's usually well received. Any questions about that?

This is a follow-up 2 to 3 days after and he put that black dot there to show all of those other areas are gone but he is, was I was benching he, I do find it right here when I was benching heavy. Sometimes that happens. I told him on the way out the door that if it comes back and you cannot really pinpoint it later in what you're doing a different activity. Market was something. So we know where it is so we come back in we know where to treat. That's what he did there and I was able to treat that. He has some pretty good bruising. The biggest side effect and the one that I love the most is that the patient is pretty happy. Afterwards. They may be a little skeptical in the beginning but it is great when they just, they have really open up emotionally and appreciate the attention that you give to them because they are directing your treatment and once you treat that then they felt validated, often times they feel like I just thought this was in my head because no one believed me and no one can describe it. That MRIs are normal and a never knew what this was. Some patients say or you eight years ago when Injured my soul. They can be ready happy. And one of the things that you may need to be prepared for is that they may open up emotionally and just sharing all source of emotional things with you that they have been holding on to because when they had this relief of pain that is a natural response. They open up and really start sharing some things with you. And to really keep that report with them and to build that rapport just give them a listening ear. Which is you may have our

experience that with for techniques that you use. Absolutely. That is actually one of the studies and one of the thoughts of some of the FDM practitioners have. Is there an emotional fascial distortion. With the crania too. Will get the third PowerPoint moved over. That is the last slide so we will do the first one, the Trigger band and we will throw into videos and take a break. Go ahead move this. Is the last slide. We will move it to the first line.

What we did yesterday and it worked very well, we talked the distortion and practiced it at the same time. Are you comfortable doing the same thing or you want to go through them all and revisit them all at once. What are your thoughts? It seems like that was over a consensus make yesterday. I will move this to the front. This is rewinding. You are seeing all of the things that will happen for they happen. I don't know if any of you remember that there. Let's start with the Trigger band. Here's a Trigger band. Like I was saying earlier you have those cross-links. The Trigger band is, there couple of ways to think about it. You can think of a Ziploc bag opening up and it's linear fashion and as you're closing it you are closing the Trigger band like closing a Ziploc bag. What happens if you're closing a Ziploc bag you don't finish? What will happen? Air will get into it. What happens if you have in that back or something like that. In the bag, it will leak out. With the Trigger band if you don't complete close that Trigger band you could cause a herniated trigger point at the end of the Trigger band where nothings will push through the one spot that is been left or that Trigger band could come right back. When treating a Trigger band you want to make sure you go from bony prominent to bony drama. You want to end with the bonus start with the bones. The patient will show you with thinkers in a linear faction fashion. And let's say that the outline stops in the soft tissue area. Let's say stops are here and you want to go up to up Romany prominent and start there. And pick up the Trigger band up here and keep going. That is an important thing when I'm treating a Trigger band. The other thing is with your thumb, you want to come bent just like this or your fingernail nice it short so you're not going to be digging your nail into the patient and you will be applying a significant amount of force. I would say close to 80 to 90% of what you have. Just about all of it. And as you're going along the line and you're treating along the line you want to ask the patient for feedback. Quick question. How do you know what direction to go? You want to treat away from you So if the patient is drawing a line from here to here the easiest way for me is to stand off to the site and treat going away. The reason why if you don't want for to be coming towards you it acts up your thumb. When you do it away from you we will talk to Tom thumb back and. That will be a lot more comfortable for you and you will find that your thumb is not getting a lot of wear and tear. It is a start to herniated you treat yourself and your better and you can move on. You can treat in either direction. I prefer to try to treat in the direction that the patient shows me but if I cannot get the set up just right you could do either way and you go away from you. As you're going along the Trigger band you want to get feedback from the patient. MI on it? They will know until you. As you are going along, they will think MI on? They may was a bit. We are off of it and they will say yes. You're off to the right of it and if you come back to the middle and back up a little bit, they will say you are on it.

You keep going. That feedback is very important as you're going. Here's what the presentation might look like.

Will do these videos first and actually because sometimes there some audio or visual we can take a break after that. And then go into the model. Will stop sharing and go with shared screen . And going back to this first one remember now that we have the knowledge about Trigger band's we will see if we can identify why it. The first thing you say is show me where it hurts and it is the shoulder and neck. You try to move it out. She is using her Pat and figure going along the posterior shoulder up to the neck and she starts to shake her fingers in and that is a herniated trigger point. Now let's show the after video. Here it is again. You retest. There it is. She shakes her head and says it doesn't hurt anymore. She will come around and show you what we did. And you can push on the herniated trigger point. This is what I did with Mike. Bony prominent to bony prominent. Then let's look at here is a soldier. You ask show me where it hurts and he is here for shin pain. What is a drawing there. Were all thinking that is a Trigger band. Let's go to the other soldier coheres here with ankle pain and foot pain. Show me how it hurts. There he goes. He puts his finger following that line. This is actually a very common line. It is going up the Achilles. What is a circle think he is doing at the end. I don't know. That might be a cylinder. After I did the Trigger band that went away. The circle thing. Often times you will see if you asked the patient more than once to show you how it hurts they will not know, they will think that they do something wrong and it will change it. You had to pay attention to the first time you ask because they might think, maybe I did something wrong and I need to change how I am feeling this. Want to make sure you really pay attention. Show me how it hurts and showed under here. I cannot get to that it is drawing this line of hair and this is that star band that we were talking about. Very common. And she's pointing on the base of her skull and a continued distortion there

Here is a treatment would look like. As you're going along the Trigger band you want to remember that you go over a bump or of muscle that is okay. You can keep on going and you can stop, switch hands and start in same place. You can pause and rest if you want. You can use your offhand to provide a little bit of traction pulling down. I like to treat with the patient sitting and treat with up sitting with the feet on the ground. Because the bench or the tall table usually are not effective. They are low too high end goal or I'm using my hands tell me and I go all the way up to face of her. We get to the mastoid it is a foot, you get there and come back down on the mastoid. That is a common pattern. That is what the treatment looks like. I will do a little mama Rob afterwards and rub it out because it is usually resort. Not just turning again. Show me how it hurts when I turn like this. So now she is showing us that there is a little bit of it off to the side. This is very common. When you're treating one it often the brain is focusing on the loudest or the most obnoxious of the Trigger band's. You treat that one and another one shows up that was there before it just never got it pain signal up to the brain because the other one was overpowering it. Now we treat this one and the same thing. Going up I usually am not doing a Trigger band over the spine. It is usual Para spinal. If you're going over the spine and you have bumping over the spine offices that is

usually now to present. Maybe your patient has, you got to be careful going over the spine. Now she is moving it is that is doing pretty good. You can see her redness on her back. She was getting used to that. We were done with her and she was stayed better. She was liking the treatment quite a bit. And liked the pain. But she said that on the pain. Now she says when I move this one in the front shows up. I had this thing right here. That looks like a herniated trigger point. It is not adequate angle because you want to be in line with the until I changed it. It is the long part of my thumb is in line with the rib going through there. That is the direction of the FAFSA point. You want to go with the plane parallel to the plane. She is still whizzing a little bit but also smiling and seemed like we got it. Awesome.

One more video. These are really common so some may call this up cutaneous femoral nerve. She has the band on a tight but she is just drawing a line of with her fingertips and that is our Trigger band. I really doing a poor job because I'm asking her to show me several times and that she started doing this weird ring with her hand of the thigh and that is because I asked the time. She showed us a few Trigger bands and we know what those are so we will treat those. Couple of things with this it is a sensitive area and one thing I would do differently is I would use my left hand so with my fingertips were not getting close to a sensitive area and in this case I use my right hand. I have a good rapport with this patient is still I wouldn't, I would definitely change this in the future and will my left hand so I wasn't getting close enough into the sensitive area. But see I am pushing the skin and I'm giving it a significant force. And following the Trigger band and move my fingers so they don't get too close to the sensitive area and don't recommend going under close and I don't recommend treating on close. That right there what I'm doing hurts quite a bit to go with that nail and push it forward. That is what it would be if you treat it towards you. We treat that one and treat another one. This is what the treatment looks like. It doesn't take very long. What you're pushing quite hard to see the fingernail is pretty good. That is why using my thumb because your file if you're at it but depth. I will work the blue ships and have them lay on their site and treat and put the blue short trips over there groin area so I can get a little bit higher without having to go underneath. This is all a bit longer video. We will go through this one. But that is what the treatment looks like. Go ahead and stop sharing. And, we started on the scapula for the Trigger band. I started on a rib, on the Trigger band on the lady that was showing her back. Can you do multiple strokes? It is all based on the patient. Sometimes your path will be, you won't have enough depth or you won't have the right angle with your force and so you may need to do another task but usually if you get it right you won't need to. But you will maybe do another pass at a spot next to the Trigger band. I have noticed and a lot of others have noted it will come, through be quite a few together. You may lose a little confidence in yourself like I just put you through that pain and now you still have it. But it might be right next to it and that one was there the whole time and now your treat that one too. You treat that one and now, it is gone now. I cannot make it hurt. That come if you do that one time your confidence goes up. And doing the right thing. It fits in a model and you will eventually get there. I have my model and will get set up with the camera turned around. So with you having the model go ahead and get one.

Will take a 10 minute break. It is 3:20. Go ahead and come back at 3:30 and have your model ready and your fingernails clipped and you will be able to see me and we can do this together. And then we will also get the PowerPoint back up and it will be smaller and you will be able to see me a lot bigger. Take a break and will be back at 3:30.

Welcome back. Have the area situated so hopefully you're ready to get some practice in. The first thing that will be doing is if you have frozen or if you have any technical difficulties the best thing is to jump out and jump back in. Yesterday our video feed from the work pretty good so let me know if I start freezing and will see what we can do to fix that. Will go ahead and get started. And let get my wife Lindsey will have a seat and face away from us. And she is, will do a Trigger band first. So go ahead and why don't we draw our Trigger band force. She has the Trigger band she is drawing. You can see that and that is a fairly common spot. So the weight you would treat that is, you may not be able to see all of me but you can zoom in on the treatment. You wanted pay attention the first time he does it and they may even leave a little red mark for you to follow he did. Here's the scapula. I will start there. As I treat my thumb is facing in the direction. It is pointing in the direction of Trigger band. You can see the direction of my thumb long ways is along the Trigger band. You start on the phone and push fairly deep. I will try to get it so you can see it and I will use my left hand. Here I go. Pushing along and pushing into the skin. And the patient is doing a little bit of ground. Then you know you're on it. So I'm going all the way up to the base of her skull. And it looks like you may have had a very end of that. As you're going to get to the very end of the skull and I've had some patients were I'm going and are you still on it. And they will say yes. Sometimes a lot of times the Trigger bands are major contributors to headaches and migraines. One of the big ones that I've seen and an example of this is a patient was admitted for migrants and she was having some myocardial ischemia but she had a major headache. I went and she drew Trigger bands just like this. Are you okay if I try this? I tried it and her headache immediately improved. I didn't completely go away but she could manage it. She didn't have to have any meds that we could have been. And we saw her again for about one year. She came to me and said I have been looking for you. I would about one year without a headache. After that thing you did. And I need you do that again. And I was blown away. I had no idea that this treatment could have given her one year of really from her headache. But tension headaches will give you a migraine symptom. Often times are associated with the Trigger band. I love to do those in headache pages. This is really common one. Often times it will follow down the arm like this. So you will be pushing up to him like that and I appreciate is hard as I normally work. That was a quote down the arm is called posterior arm Trigger band. It is up with the shirt and a shirt over and keep going. And keep going and usually the posterior arm, normally they go up the opposite neck like this. So that is the Trigger band. So I cannot see if you have any questions but can Ariel or Mitchell join their questions pod. Do you have any questions on the Trigger band? They are pulling up some other pointers to this. Don't treat over close. Will you will destroy your thumbs if you doing that especially over pants. Want to make sure you on skin and, the bony prominence and you may be able to do it a few times. Get their feedback. We have a bill that are typing. Will see what their

question are before we move on. You can see that we left a good red mark and in most cases people, this will turn into a bruise but some people it will turn into a bruise and you need to be careful. When you cross over to the other side of the neck to the left up when crossing the spine I usually don't let up when I'm crossing over perpendicular. If I'm going up this spine which is rarely the case I am trying to be very careful. Is more of continued distortion in different spots. You have to find it a push on the one spot. That it safe. A Trigger ban is probably also find that I tend to not do it mostly because that is not where they are showing me those. Trying my own IT band going from hip to close to the have a bump so the different herniation and material catching up at that area. Good. And thinking of your Trigger band think of all ribbon okay you get a ribbon? Think of it like a ribbon and it has a twist and as you're pushing that twist. The twist is getting tighter and tighter by the end and a lot of it is caught up in once you get to the end it is all smooth out. Will get a ribbon to demonstrate that. But you will fill in the tissue is coming up and you want to go all the weight to the bone so you iron that out. IT band is a very common spot for Trigger band. Until on skin you will go through there. Treating yourself. If you are not getting the results treating yourself sometimes it is because you cannot get enough pressure. That is because of your angle of treatment is hard to get just right. Maybe your thumb isn't quite strong enough. What you may find that your thumb, this joint in the thumb is bending and extending this way. That will get stronger as you go and it will be a lot better for you. Think of it like this. The bottom of it starts twisting back. And as you're pushing along and it gets tighter and tighter and tighter like this at your pushing along and as you're ironing it out the reader gets closer to the top and eventually have it against the wall. That is why the tissue building up. Good question. Any other questions before we move on. While thinking of your questions we can do, demonstrate again but it will be the same everywhere. Whether you're trading along the IT, shin, the foot it will look the same. Speaking of it why don't we do the foot.

Lay on your back and give me your foot go. And it common presentation start with one or two fingers and will draw a line up the foot. There's a pony prominent and a bony prominent and that is where you have to put. Sometimes with shoulders your feet are so thick that I am just destroying my thumb. Trying to get in there nice and deep and good. But is still so important that you have the thumb, the feedback from your thumb as you're going along that. Sometimes I use a tool to help me. Yesterday people asked about acupuncture and how this relates to that. It can relate quite a bit. If you're using cane or doing scraping you Mike the treating thesis sources and not know it but sometimes your treatment may be less effective because you have too much surface area. If I'm telling a patient to treat themselves and you cannot get it they will tell them to get at the end of a spoon handle or has a fine trial. I use this tool sometimes. Because my thumb has just about had it. This is called it on. And I go to Amazon and people use it sometimes. To do different scraping techniques and things like that. I will sometimes take this and go along that line if I cannot quite get there. Sometimes if there's a really deep continued distortion. I had a patient that had plantar pain. She has surgery twice and she said everything but radio frequency ablation.

It is still insignificant pain. We did all the Trigger band and we know it was better but there continued distortion that was so deep on her that I could barely get to it. And the way I would do that is I would press one or two. I would try to do as deep as I can. Then I will go get really deep. Now I go this in and she said you on it. Sometimes you need something to help you out but I was an only use these things if you have to. That is the Trigger band will go ahead and to the herniated trigger point.

Let's pull up the PowerPoint. Can get the PowerPoint up there? How about while were waiting on the PowerPoint I will share my screen. And show you a video or the herniated trigger point. Hopefully this is not freeze. This is another patient. You cannot hear the volume but show me how it hurts. What is she showing there? We all know what that is. That is a Trigger band and she stops right there. And she is turning her head and she is fighting that herniated trigger point while she is turning her head. Just trying to show me. While recording I tried to go ahead and treat her. Which is pretty challenging. You can see my mom is long ways moving in the direction of the Trigger band. I go over a bump. That is okay. You can see her face squinting. We get to the bone and I go down towards her mastoid. Now we will try to find a herniated trigger point that she was showing us. My thumb could be a better angle. I rotated over a little bit and try to push with the one hand. I put my other hand on top of the distal joint on the thumb. But she is turning out and still feeling something. And she is using two fingers up on the neck. That is herniated trigger neck. Two figures in our herniated air. What did I do instead? This is probably not the best thing that she needed but I went ahead and tried to get that in the middle of a Trigger band. Usually herniated trigger point is in the middle of a Trigger band I tried another Trigger band thinking maybe I would get it in the middle of it. And she said okay. She is turning and said you can still see it in her face. Not quite there from here and CSS a herniated trigger point so now we're going to go directly onto it and it probably would've been better to go directly to it and follow the patient's gestures. This is in the building where I was the making a few rookie mistakes but really falling her gestures and going right for what she was showing us. So here we go. And she is squinting. Let's see if we got it all. She is not squinting as badly. But is still there. I will go over why that is the case. This is why you really have to just stick with the model and you will get it and not give up. Just keep on going because it was still there. I don't know if you got it all. Will go again. Actually we don't get to see the end of the video because it cut off. I will show you what I mean by what is happening. We're still waiting to get the PowerPoint backup. Let's see if I can do it.

What is happening with the herniated trigger point we have fascia that is not through the plane. This is a fascia point had tissue that is herniated through. So we treat that normal you will go and push and squish. And you got it. And you will say I felt the squish. Less retest. They will say it is better. Sometimes it is as big as you're pushing you just get that much. You may fill a squish but they're still more. That is why I recommend and practice I get a palpate over the area. The PowerPoint is at a good spot. I always tell people over the area and push it in and get a reduction and I feel like I am working around the

herniated trigger point and getting it all the way in. There is a summary of the Trigger band. Burning, pulling, your interesting it and using that so they present with the sleeping motion. Now will advance to herniated trigger point.

Sometimes like I was showing you if you have to work on it a few tent. I tried to do all that at one time and only push as hard of I need two. Was it gives and squishes, you will always feel a squish. Especially in the beginning you may not get it. But you may notice that they get improvement in the range of motion. The squish is not what we treat. We treat so they get better range of motion and less pain. We do get a squish then you know you got it. Then normally there is a change. A lot of times think of this happening. Here's the herniation but the tissue is way over here. As you push you're pushing towards this location of the hernia and you have to work on it a few times before finally it snaps in. That is why you have to try to fall into palpate the area and feel in the direction where the tissues want to go. And usually into the center of the body is the direction that you need to push. If you're pushing and you're doing a herniated trigger point on the shoulder and you're pushing mostly up then you're probably not going to get it and you push more into the body.

That is a herniated trigger import. That is a presentation. Two figures on the areas. The summary of the trigger point. I will leave this this up well with you. Let's go ahead and treat the SCHAT. How would you demonstrate that if you are a patient there two things of the soft tissue area. If you a lean back a little bit. Right here is where that is. I will take my thumb and I am going to push in there and at another thumb and it is a one, two, three and that is it. At the end sometimes I got to the point where I give it a little shove. Another slide we showed, yesterday we did on Lindsey herniated trigger point on the deltoid. Yesterday we got a really good squish. She is a little bit bruised on the side. But we don't feel it go I wanted to show you that. Is your palpating here, let's say she is pointing here and that is a really common place. You would palpate the area feel with the changes and there's a little bit right there. You can see it. My thumb is an area and I use my other hand to push. I push that right in. About 3 to 5 seconds. She sitting on top of the table with the feet on the ground. If I were to do this I will probably have her sitting with her feet on the ground so as I push I will not knock her off the table. That is another common trigger point. Let's lay on your stomach.

Another common one is right here. The plain, the direction that you want to take with this one is towards the spine angle. Like this. And this one I've seen this with usual bruises quite a bit more and I would basically as the patient if it is okay to push on the skin. Will expose the skin and as we push right on the spot the same thing. So you guys can see and it is like this. And it is 123 and we will get a little squish at the end. Finally the piece said I give up and squishes. Kind of like that hook that we were talking about earlier. What eventually gets. In this case the forces trying to restore normal function. That is a bull's-eye and common one. If you're treating the sacrum, if you are DL and treating the sacrum a really common herniated turning point that they will have is around S two on the side of the sacrum. The way I get I have them lay on

the stomach and the you a squish test and we find where is not sought and if it is not sought soft I would treat a skin and get their permission and go ahead and treat that one as well and I find that when I do that that helps a lot when, with the sacrum to keep the sacrum in position. I know my video was small and I hope you are all able to see that. We don't have to make it big. I think we're good on the TV. We call it HTP. We talked about the super, the Dell told, bull's-eye, there's one in the area that is common but remember that otherwise ever the patient shows you is where the HTP is. You have any questions about this? Can you change positions to get a better feel? Here is our good demonstration of that. Let's say to have EP and is right here and in the renal area. It can be a CDM at the tip of the QL or Reno, renal, blank STP. Sometimes it is best to put them on all fours and came face, that is fine.

That way I can push just like this and I'm not really pushing and she is not overextended if she were to lay on her back. That is how you treated this one. And actually do quite a few treatments on this one. I will do this in this position because if you it about it, you can make that screen a little bit bigger. If you think about what you're trying to do you have going with the tissues, you have multiple plane of asset that are trying to shift and slide over each other. If everything is flexed in and not taught you can push something through tissue that is not taught you will have a hard time pushing that through. If it is tight in a neutral position then we push it will build a snap through and hold it. And if things are too tight, in a flexed position and from all the muscles, they have a lot of tone you have, it will be too tiny and you will have a hard time patient pushing through the excess trend. You want to find a neutral position. If you have someone laying on the stomach and they are uncomfortable or they do they get really extended their backs and that lumbar curve and it is exaggerating. Sometimes it is too much to get the treatment done. That is a great question. You want to be a neutral positions. Any other questions? I have my treatment model so let's go ahead and make the video full screen. I have a great catch, who is a basketball player that I play with. Is sitting on the table. Greg, what you come over and tell us a little bit. If you're okay, you can see on the video why did you tell us what happens and where you're at now?

It was about 16 weeks ago, about 16 weeks ago I was playing basketball and when upper a rebound and when it came down I landed on the guy's foot which totally rotated my ankle to where I was diagnosed with the restraint. I had complete tears and ankle and about one week ago when I was able to start jogging a little bit, but it was the worst pain I had my whole life. Of when I had the great three sprain. Some ability but not strength yet. Is a long road to recovery for sure. A good question that I was asked to show me how it hurts. If you show us what activity that you're doing, what kind of activity makes it hurt. When I roll it like this when I'm running or jogging and I roll the top of the foot at the joint is where I have the most pain. Could you demonstrate that? This is my left ankle. When I go like this is a lot of pain right here. Up on top when I roll it is. What does he have? Write it in the chat. What does he have? Let's bring that up and do a set of. According to the national dispersion model what does Greg have? Trigger band. Let's go ahead and treated that. Let's say we do that distend, but scale of 1 to 10 how bad does it hurt and you are doing that? I would say about a six.

Will go ahead and start the video back up, and share. And we should be back okay see me? Are we back in business? Good. If you could go ahead. Let's see if we can let everyone watch this. Let's turn the table. Now go ahead and have a seat. Now everyone has a little bit better view of the front of the ankle. He drew the line. I was watching the first time. He was more on the medial side and he drew it down just like this. I like to treat this going towards the feet. Because they usually go to a certain toe. I will ask him what Holy Ghost do because a good a different toe. He will give me the feedback. As I'm pushing you will note that I'm on it. I never treated it before. Output pushing pretty hard. You will know if I'm pushing over here that Hearst. But I'm pushing on the spot of hurt. It will not harm you. We may lose you a little bit but what would likely have and where done is we do that will again will have less pain maybe even all the more range of motion. I will treat towards you. We went through here. I will start hardware. You let me know when you start getting too hard. We still going down. A little bit of swelling. So far. Are you ready? You notice my speed. I'm not going to profess. I am going very controlled and you can help control it. Goes to the second toe. We going all the way and ending the Trigger band. Think of the ribbon, unzipping it and taking it all away to the end until we are done. Whited to have you come over here so they can see you on the video. We don't have to move anything. Go ahead and try that. How does that feel? Is it a little better. Before it was about a four. Show us where you're feeling it now.

What is that? He's using one finger and pointed to a bone. We haven't gone over this yet but I did a little bit in the beginning there one finger to a bone? What you think this is? The continuum distortion. That is a really common one. That is called the anterior ankle CD. This is one that we could treat as well. This one is pushing up my thumb into that spot but 3 to 5 seconds. The idea is that the Esha has pulled away from the bone and we will push it back in. Will do it in a little bit of a line so we would do a Trigger band. Are you comfortable right there. Usually have to push pretty hard. And keep going up the Trigger band. I feel like I'm still on the Trigger band? I will keep going. I push and pull with my back thumb. Am I still on it? Yes. What are you feeling? The Ricoh. There we go. And use it in good force but let's move this over so come back down and take some steps on the edge of the carpet. How does that feel? This is about two. The thing with STM is you can get greedy because you really are not going to make anything worse and you won't have a chance to make things better. Will pinpoint where you feel it now? Remember it layers on his cell. He is drawing with two fingers. What is that? Maybe have a little here needed trigger point. Will put my thumb to flex that. And use my other hand to push it back. I will ask him is it one or two? I will change my angle. I would treat this one. I snap off with a little bit. That is okay if that happens. In my Nellis superthin but I still left a few know Mark. You can see, this ankle is still swollen. Compared to the other one. I will be curious if after this treatment the next time a team if he no longer has pain. If the swelling improves. We did that and we the figure it this way a little bit. You can see our last language here in the last one is there. May be a Trigger band also right through the middle. Will go ahead and treat the Trigger band right into the middle of that as well. He is bending his other leg. There we go. Still on it. And? The middle one.

We just treated that with a little rub. Will see where you're at. I always tell the patient I want you to keep them away. It don't want you to rest. Movement is what will help keep these changes that we made to the fascia to keep them there. I would put in heat on the area especially for the next two days I will not take a hot shower co to stay hydrated. As Dr. knows the fascia loves to be hydrated. Herniation's more than three seconds .You can see I was using my hand so there's some swelling there. That is a relative contraindication and that is because you need more force to get down to where I need to get to the love. You could treat within four days. I usually wait about one day or two. I have asked some people come in and say yesterday I was in volleyball and I sprained my ankle. Her and today and I will treat them right then and there is some improvement. If you wait a few more days, up to four days you may have more improvement at that point because it may be less swelling and this may help you get to this bods spot. Walk around a little bit and tells how you feel. Have it from a six to a two. Let's see if our greed got us even better. Now it is a one. We are about down to one also. At this point you can say is this something that is acceptable to you and the patient and you want to keep going. Were probably to the point where we would be pretty close to calling it. It seems like, it may take one minute. There's one right here that I can feel it will tell you that and let's get that one be. Will leave that up to the patient and I will follow up with them. My first time following up I usually don't want to treat more than 2 to 3 days. I want to wait at least that many days. And sometimes I will go a few weeks if I want them to do something themselves like some physical therapy or something like that typically I try and say something like this and try to have them back in about three days because if they do come back the sooner you get them treated again the longer it will last. None of you can see it really it as a going down patient I did leave, there's a little bit of pitting edema from the swelling and he is probably not getting a lot of good flow. That may contribute to healthy tissue. That may contribute to something like this coming back.

You start adding more mobility. Now we are progressing our treatment a little bit and I would try to do one more. Come back up. He pushed with two fingers to hear two that tends to be the spot of most concern. Sometimes you do need to do it multiple Trigger band. I will start about ankle do one more these and will have them retest. See how was telling me with this feedback told is going down. We are building a rapport where he can be aware of the Trigger band. See how the communication is universal and he can identify that. Tried to do your job but do it a little softer, maybe not so much force and see, you should arrange to see if that changes anything. Go a little bit more. That is much there. We are saying, this is a very patient guided approach. They do something that they struggle with and we treat according to what we find. That is how we would progress through a treatment. Were just about done with Greg. Any questions for him or for me with this case? Do you feel the pain from the treatment was worth the end results? Yes. And finally, the range of motion, the pain was very minimal. I was able to roll my ankle more. Is is still painful, it is swollen but the pain and range of motion is more now than it was before I came for sure. That was pretty much ends of the Condor. We're teaching this and there thinking, it hurts so well. That

would be about it. An appointment, or first appointment I didn't do a lot of things that I may do if it is the first time I seen him. This is definitely nothing you can do and a 20 minute appointment and certainly if you had 40 you could do as much more thorough exam. Pretty remarkable and the changes that you can make. Thank you. I can have you come over another time. Only if you're on my team. Will bring the table back over ankle to any distortion.

Let's go ahead and get the PowerPoint backup go to the continue source and should be there. We have about 40 minutes left visit any trigger point. Remember that is the radiation to the fascia plane. Now let's do it quickly, knowledge check. Better to be the most let's bring this poll. 45-year-old patient presents to you with neck pain. According to the STM what is the patient's diagnosis? About nine people are responding. Excellent. Radiculopathy, I was in the emergency room as a resident and the patient had right and arm shoulder pain. We did a cardiac workup they could be admitted with their baseline risk factors. What the patient was demonstrating the Trigger band down the arm and I talk to him about it and said are you willing for me to try this. It would completely away, confirmed the diagnosis. And the patient ended up not being admitted. And did an outpatient stress test if they needed one. That is Trigger band unless proven otherwise. I would treat it and see how they do.

Less wind to the Kenyon distortion but this is where the fascia where it connects to the bow. It is going to the bone a calcified and turns into bone. Is a solid Fascia and bone and there is some hope to do better. They come into the bone with calcified entrance into bone. That is why if you have a fracture of the bone on or you break the tendon appears somewhere else. At that could do with the fascia is turning into that a little bit of the fascia can pull away when the stress is applied. The stress is applied, pulled away and it cannot reattach itself. The only way is the body knows how to describe it is the point of one finger showing does the anterior ankle which is a common factor that we see. We pushed right there on the bone and gave a good job. I didn't feel anything under my anger. With the continued destruction you don't feel it warily. What you want to feel is the tip of your thumb right there. It is present your phone thumb is pressing against your bony feel the two bones touching each other. That is going no you have a force and they will feel it. Once you got the force on their you get a little push at the end and that is it. Stop to five seconds and test. You already saw that Greg. On his ankle but let's have come over go ahead and treat her arm. See this image demonstrating where that continuum is. You will read in the book that there is continuum's that are pull away and continuums that are pushed into bone. This last image, the pathologic site could be the site of the weight or it could be the site in. The portion is usually we have some kind of blunt trauma that smashes it into the bone. The other one is a pulley injury, repetitive injury. There two different ways to look at it. If you're pushing on and it doesn't help and they make it a little worse you need to find a way to pull it out. That maybe a little bit advanced for this online workshop so you can look at the book at that. But the most common spot that I see that is, if they point with one finger here at the FI joint that is usually an inverted we have to push this away. That is the answer for that one. It is usually put in the

scissor technique. Show that first down word and late on your side. The way I do that is I grabbed her arm and pushed is like off. If she pointed on the side then me basically, we're grabbing arms here pushing away. Trying to pull the attachments push them away so we can full the inverted CD out. Will treat and inverted CD which is the most common. We did the ankle. But the common spot, is you're on the arm. Here's the patient presenting. Again relax and get on the bone and lift the tip of your thumb. Until you feel the tip of the bone on your thumb. Tried it yourself. Give that a try. Or on your partner if you have one. You can feel the bone is touching each other. One, two, three, little shove and you have it. A story for that one I was at the VA as a third-year medical student and I saw this guy in the lunch room. He had bands going around arm. That could cause a cylinder distortion. I was looking at a said if I can try this because I haven't tried this. I asked him were hurt and I talk to him about it and he said go ahead and treat. I go ahead and treat them and for the rest of the 30 days on the rotation I see them every day at lunch, not one the brace anymore any way he said the pain was gone. Pretty amazing on the one spot. The other spot is the TMJ pain. You think of the bone when they say they have pain, the main pain may be on a different angle or change your angle to see if you can get on the right one. I might be right on the phone or in for your order or underneath that you need to get on her. The most tender spot where they are real reducing the pain and that is what you the pressure this area is very sensitive about just pushing will say that hurts just by pushing. Make sure it is there pain and you are reproducing that. If their saying that is the one that is where you want to go ahead and hit it. That is continuum distortion. There's another treatment very common spot at that ATF fell on a sprained ankle around that, and they will point with one finger. Just like in this picture you will push with the tip of your thumb on the spot.

That is a continued destruction. You apply the force and to ship. Those are the three treatments. Is go ahead and move on. I thought someone was typing but they deleted it. If you have a question drop it in because other people might be thinking the same thing. Here's the folding distortion. A folding is the fascia in a joint space has been compressed and twisted. Is not duck in this position. And actually feels good if you reproduce the injury and you compress it in it says that releases a little bit. If you pull it out and they say ouch, don't do that. The way to think about this is if you have swoosh, that is a compressor injury. Us focus on the shoulder. You press the shoulder. They will like compression. You can change the angle, bring it up, down and quickly moving that joint back into the direction of the injury. What if it cannot tell you the direction of the injury and they look up and said out, my shoulder hurt. There couple of different ways you can approach that. You can start by pulling on the arm. If they say no it doesn't hurt the contrite to with the arm up like this and that is a treatment. Or you can bend it and you can do that and bring the arm this way and told her. See if that hurts. What I like to do is I test a couple of points. Does this hurt. I will pull and in that direction. Another thing with folding, let's say it is in the job. I did this Saturday. I put my thumb with gloves on their arm and pulled it down. When was somewhat have an injury where here lower jaw is getting down but maybe not a normal injury. Maybe from all of that, maybe she is giving herself a folding and

what I did was I grabbed her job, had her bent her knees up and with one hand in the back of her head I pulled like this and I forced that fascia in the joint of the TMJ to compress a little bit and I let it go and she said, that is it. It is gone. That is the way folding works. They hold it and you need to push that joint into attraction and it is in motion to find which it is. If it is a comedy like to be compressed it is called refolding. If you'd like to be distractor or pulled away it is on holding. Just like a CD has an inverted CD. Is the fascia in the joint likes to be compressed it is refolding it is some sort of compressor injury. If it likes to be distracted and pulled away it is unfolded and he probably has some sort of injury like the guy in my case study with the shoulder.

A very common thing, it may cut to the site you know it is the joint on the right and a lateral side of the .You think about it if you're shoving the of pushing the with medial force you're opening up the lateral side and your closing off the medial side. Is your pushing you may be treating and refolding it on the medial side and unfolding on the lateral side? But one of the most common ones is holding the and that is a folding. The way I treat this as I get them nice and relaxed so I don't have them help me. She is helping me. Don't have them help me and practice length elect down like that. When you straight they don't want to be up in air into this. Strengthening want to be on the table. Give it a good work in the patient will shake and move around a little. It should not hurt you a few test runs before you do it and I may do it harder that he had been it up and try again often they will like, he feels better. Underneath the patella nine times out of 10 that is anterior drawer unfolding that they want. And that they like. Let me demonstrate that. Let's say you're doing your test and that is how we demonstrated that the. You come up and do your anterior and pull up if you push and that hurts. Pulling like this you can sit here pulling and get it or the way I like to do is bring the like up my own laundry and grabbed the site and the lower leg this way from the femur. These folding treatment can be pretty challenging. The idea is compressor you're pushing in so come out. Avis or pulled to see how it bends. Pull it or it will go back in. That is the idea with these two any questions on the folding? Went through that fairly quickly. This can be any joint like the ankle. Treated an ankle and a guide that was jumping out of airplanes and he was medevac all had to do was take the foot and wrap my hands around it and pull. Did this several times at different angles ended up thing better. That the pain is just a general hold. There grabbing anything at first. Take a cup it like that and cup it aside like that and usually it there holding it on one side more than the other thing that lateral one patient so funny. She came in will increase of about one square with 30 bend. I asked show me work. This is how she demonstrated it. There is some discomfort. They will like the anterior pulled more than the posterior. Thinking about my CS PS patient to see if this helps. The drama with those are the factory to the physical therapy treatment normally something else, it is some sort of fascia distortion. I like to screen and do a few of these pushes and pulls. Same thing with any me will bring it down straight and fast. If I bring the up all away and ended like this and they say it hurts they will like the web. That is testing the joint in one range to the other. The bent and the straightened. But it is I'm doing that and say it hurts I would treat it and say how is the pain now it is better than I will say

carry-on. The other thing with folding is it presents when I hold it. You can compressed just like this into the shoulder or poll. Is a video , we don't have time but one thing about thing folding like to say it is better in the morning but gets worse that is likely unfolding. I say in a lot of 60 or 70-year-old people have chronic arthritis. They cut their hands over the knees and is a little bit of swelling and sometimes to get worse when it rains I go ahead and treated and they say I cannot really make it hurt IMO. I cannot tell what you did but lots times the folding are actually away but a good amount of time. Is deep in the joint might draw a line across the joint with a mind go like this, put a finger on either side of the joint or with the finger is here he might draw a line drying joint and it doesn't follow a pattern like a Trigger band.

The cylinder is thinking of that superficial fascia and is coiled over itself. That will present in a very bizarre way. If someone said, I don't know if you asked them how to show how it hurt. There's a jumping or sweeping pain and squeezing as they go down. That is from the back they can be sleeping the whole hand. That is a cylinder. Very calmly cylinders are in the extremities, thoracic spine so is the lumbar spine. And what you want to do is love that superficial fascia to get back to his normal position. The easy way to do this is to call the double thought. Is putting two thumbs in and it should not hurt. Impressionable bit and pull hard. You press in and pull hard. You do this in different directions and you test. The other way you can do this, I forgot to mention one thing with the. It can then intercept the folding and separate the two arms going back to the cylinders at different ways you can do, we call them snakebites, Burns. Tried to trust her arms in different directions. That is when we can treat the cylinder. My favorite way to treat is called the squeegee. You take your fingers around the arm squeegee down. That is what we do. Also may say it is like a lightning or shock. At this numbness and tingling and very bizarre symptoms. Is how they might resent double thumb? With the other thing is cupping. Positive ways to do cupping go ahead and sit on here facing with. One of my favorite ways to do cupping is the key we. This is what we used to deliver babies with the vacuum. I got one that was not used. To use for this. Will put it on the back and I start at the midline. The syllabus and I don't get to the green spot on my feet don't want to cause a hit last time this will better with her laying her back your pulling and is called cupping sliding push the slow button on the underside of the kiwi. That couple was fighting and takes fascia and keeps it negative fascia and left it on twist on his cell. The other thing can do is cupping like this. This is a set of silicone cups. Suction cup that on their and that is on call we have a Stanley Cup leader cup under and had the go through range of motion for about one minute. For the back I have to twist, site to site and have a flex and extend. For about one minute and the idea that is giving the fascia chat to twist unstoppable you need special credentials in coupling clinics? Check with your credentialing office to see if you do.

Lay on your back sorry, on your stomach. Another way to do coupling if it is on a big surface area, I like to pull this out for that and it is a medical drama. The patient can sometimes, give you a funny look when you pull that out. She's in this flex position so I might the pillow

underneath her abdomen or have an arms her abdomen so she is a little bit more judicial. As you put it on their pull up like this for about 30 seconds. And then retest when I'm done just like that 30s big plungers and their smaller one. This is a kitchen sink under the so it is a little bit smaller. If you're working on a fix surface area sometimes it's a lot better if you is a big plunger. There's a coupling. I have a set of cups like that too. Kind of like show and tell right now. It looks like this and you can get them on Amazon they have a panel like this. Attached that to the Enzo of the cup a few times a don't pump more than two times. You can legally bed stickies like we were talking about earlier. The goal is not the cause bruising is a cost the skin to come up and the fascia move around. The goal is not to cause the bruising. The other things that you can use for this is; cups, chip clips, this a lot of good cupping sets on Amazon and also is a different basis like that you say will cupping sets for about \$30. You can use chip clips. If you have it right here you put chip clips on their and do the same thing. The person with the MS hug they got their own kiwi and them treat themselves at home now with their own kiwi and do cupping with sliding. There's a plunger, the kiwi, and bazaar description, numbness, this is very common. If you hear that you're thinking that is a cylinder that cylinders on your head. Often times the answer is cylinder progresses headache and there might this and holding it on site like that compression may be from the side to side or the head and that is where the pain is. So you press and if they'd like that and you can press more. If you are refolding in this direction and unfolding get to think you're doing two things at once when you're doing that often times if you do cranial manipulation which I do, I at something like that to see if there is any folding or anything else. This is not often see it still pretty good to know. That joint fluid space with fluid that still in there. Often times they just feel like that's is gone and they often seen in the and that is why have much to do is it is treating a tectonic. Of their gestures and body language and will not use their hands must. They will for the joint around say it feels like it needs pop. Refills the bone on bone. The treatment for that he tried to pump with through that joint space to create some cushion and there and is off for ways you can inject it or you can try to provide the will to do the hip with the web , and kind of pump and turn it pump this way. In turn. This week. Same thing if it was the arm. Left arm and I will pump it like this pump here and then for. Will pump in and see their range of motion will get better and better and can teach them the other way you can do this is you can bring back the plunger. If you have a tectonic fixation in their back you can put the plunger on there and do the same thing that we were doing earlier. She is using the image of the tedious thing. If you're pushing and pulling into that you're creating the pressure to try to pump fluid to that joint. She is doing it and here's the summary.

Let's check our knowledge. We have a 69-year-old female go write your answer in the chat. She reports that her pain is worse when it rains. When you ask her to show the pain. It is on the ball. Q. what the like from a flex to fully extended position. That is the treatment for that and hopefully with a little bit of confidence. I know we went kind of fast, maybe you did get time to practice those but left a lot of images on the so you can see that and how to do it. Hopefully we didn't go too quickly that I wanted to be, at least demonstrate how those different

treatments do. There is another video that I will show that she does like every single distortion and it is chronic neck and shoulder pain. It is in the video link is. Number 10. Practice using your eyes and serving and trying to attend me she has this or that practice identifying those. That the practice of I started back in 2014 and the last seven years it has become my primary and my just a great is really low because this works so awesome for my patients.

Take this skill some people are not motivated by the best outcomes with patient and hope that, maybe this has a five about incorporating this into your practice as it does get the outcome that you like. The 20 minutes that we had him here we took him from six to one. Practice the website, I'm usually at those sessions. This book is probably the best one if you want to get your own book model like Dr. Todd. It is right here on the website you go NSAID.com you can pull up that book and order it and also get the modules. That is it. If you have any questions? If you have a patient that you might want to describe what they have and show. Right that in there or any other questions that you have. Facebook has a book NSAID working join and post questions. If you have any thoughts, are you willing to share your email? You can email me anytime. But that is my Gmail the one I will get to the easiest. Here's my military email. If you have any questions or hard cases you can email them my way and I can help you out. Help get you to research if you are interested. The FDM hopefully uses it and think about the model. Thank you for your time and your attention. You hung in there about four hours but I appreciate it. And thank you for the pain skills trainer's and allowing me to do the presentation. If you email me I can send you my phone numbers and we can talk a little more if you want to talk.