[00:00:00:02 - 00:00:37:02]
Speaker 1
I'll give you a brief overview of how I approach these things. Generally, for anyone coming in, first goal is to identify the source of pain. And I'm looking for primary sources as well as secondary sources and then sensitization processes that may be in play. So when I think primary source, I think about endometriosis on the bowel. I think about sacroiliac joint instability. I think about hip impingement or hernias, things like that that are themselves a primary pain generator that's not secondary to something else.

[00:00:38:10 - 00:01:03:04]
Speaker 1
Now, you can dive into this further and you can say oh, well they have hypermobile hips, they have hypermobile SI joints, they have hernias. Okay, so they have EDS and that's the primary condition and then the hernias, the secondary condition. Fine. I'm looking to put all of this in context to kind of understand what really needs to be treated at the core and then what's downstream from that.

[00:01:04:10 - 00:01:06:17]
Speaker 1
Secondary conditions, things like a piriformis syndrome,

[00:01:08:02 - 00:01:38:23]
Speaker 1
OI hyperactivity, a bursitis, like these are almost never primary conditions. And the same thing, putendal entrapment. You have to answer the question why is there putendal entrapment, right? If they have acne, you have to answer why are they having acne? What's driving that? Is it guarding from a hernia? Is there a surgical scar neuroma? What have we not identified that's driving this process? Because that's the primary that we have to identify and treat. Otherwise, we're not going to make any progress.

[00:01:40:15 - 00:02:07:01]
Speaker 1
And I know with pelvic floor, I got cursed out on Facebook because I said pelvic floor dystonia is often not a primary process. It's often secondary to something else driving the pelvic floor to guard. And someone didn't like that. They said, no, it's always pelvic floor muscle hyperactivity that's the primary issue. And if you fix that, then everything gets better. And I mean, anyone who practices in this space knows from practice that that's not true. Wouldn't it be nice if it were?

[00:02:08:08 - 00:03:02:03]
Speaker 1
So identifying what's actually happening. And to do all of this, it's not always like you can just take a look at someone and immediately

know sometimes it's a little bit of trial and error. It's iterative to understand how they respond to different treatments because if they do go to pelvic floor physical therapy and they do improve with that, then maybe it was just a guarding response and the reason for that guarding is no longer present. So you've seen patients who had a UTI that was undertreated and they might have developed a deeper infection and they developed all this secondary guarding and reactivity to that and then they finally get the infection identified and treated but the guarding process will often persist. They may need some trigger points, they may need some myofascial work, but then you work through that and then they normalize again because it's just a leftover guarding process. And if that's the case, amazing.

[00:03:03:03 - 00:03:14:08]
Speaker 1
If you go through all that process and you just don't make any traction, they're not getting any better, you have to ask why. What is it that's still driving this process and that's what we have to figure out and treat.

[00:03:15:12 - 00:03:28:00]
Speaker 1
And then of course the sensitization process where the nervous system kind of acclimates to these pain signals coming repetitively. It actually changes how it encodes signaling, how it synapses at the spine changes.

[00:03:29:04 - 00:03:44:11]
Speaker 1
With this, you get increased sensitivity to light touch sometimes. Sometimes things that shouldn't be painful are painful. Things that are painful are more painful. You get abnormal sweating or dry skin or hair changes or discoloration of the skin, swelling.

[00:03:46:00 - 00:04:15:00]
Speaker 1
The pain that comes with this is usually poorly localized. It's hard for the patient to explain. This is sympathetically mediated pain as opposed to somatically mediated pain. So somatic pain, if you step your toe, it hurts. You point to your toe, you know it's your toe. If you cut your skin by accident, you feel that very vocally and you can describe it. But sympathetic pain, it's really quite nebulous. It's hard to put your finger on. It's hard to localize. And it's often hard for patients to describe. And it often moves it around.

[00:04:16:02 - 00:04:29:01]
Speaker 1
So that's often a clue I'll use to say there probably is sympathetic pain because they really can't describe it very well. And it's also very bothersome. And there's this emotional component because the

fight or flight response is activated from sympathetic pain.

[00:04:31:03 - 00:04:44:01]
Speaker 1
Some patients describe it like the fire alarms are going off, but you can't exit the building. And it may trigger migraines. It's going to cause GI issues. They might have TMJ tension that goes along with it just because it spreads up the sympathetic chain.

[00:04:45:04 - 00:05:21:12]
Speaker 1
So looking for other signs of autonomic dysfunction, any of that that goes along with it. And of course, if it's triggering PTSD, if they're having migraines with all of this, it just checks those boxes to make you think more about this category. And of course, the sensitization process is something we have to treat separately from the focal anatomic pain because say they do have hernias that have been undiagnosed. They're causing all this referral pain. They have this big guarding response to the hernias because it's going on for so long and because the viscera in the hernia is sensitized, their sympathetic nervous system becomes activated.

[00:05:22:13 - 00:05:55:18]
Speaker 1
When you meet this patient for the first time, they're a big ball of pain and it's really hard to see what's going on and what's driving it. And unwinding this reverse engineering is the process. Part of that is recognizing the sensitization, dampening that sensitization pain and then identifying the focal areas that are still active. So the analogy I use for this is you see a fire, but the flames are so big you can't actually see what's burning. So sometimes we have to knock the flames down and then we can go and look at what's still burning. What are those inbers that are still hot?

[00:05:56:21 - 00:06:42:04]
Speaker 1
And so there's a different process for how we go through this. And of course, the first step is sort of seeing that picture, explaining to the patient what you're seeing and getting them on the same page with this process of identifying primary, secondary, and then sensitization processes. So really the first visit is getting a handle on all of this and explaining our process to the patient because then their mindset really shifts to focusing on these things. So they're going to be able to think granularly about what they're feeling in their body and they can report back to us. So if we do do something, whatever effect that intervention has, they're able to categorize it and they're able to start to focus their understanding of the process in their own body, which is ultimately what's going to have to happen. Just like you train them on biomechanical patterns, I'm training them on thought processes around pain and sensations in their body.

[00:06:44:15 - 00:06:48:05]
Speaker 1
So identifying the reasons for the pain and there can often be multiple...

[00:06:48:05 - 00:06:52:18]
Speaker 2
What does acne stand for? I'm not very...

[00:06:52:18 - 00:07:15:15]
Speaker 1
Sorry, abdominal cutaneous nerve entrapment syndrome. So when we think about the three layers of the abdominal muscles and the nerves that have to transverse those layers, the internal and the external obliques, if they're both contracting, they really cinch the nerves that go through those layers. And so if they're having sharp abdominal pain or hypersensitivity over their belly,

[00:07:16:22 - 00:07:18:24]
Speaker 1
why? And if those muscles are tight, they're guarding,

[00:07:20:01 - 00:07:21:11]
Speaker 1
there can be some red entrapment.

[00:07:23:05 - 00:07:25:13]
Speaker 2
I just wasn't familiar with radiation.

[00:07:25:13 - 00:07:35:09]
Speaker 1
So thank you. Yes, acne's. And if you look at the studies, you'll see all these random treatments looking at Botox and... Anyway, we can talk about that later.

[00:07:36:16 - 00:07:58:07]
Speaker 1
So looking at reasons for pain, primary injury, degeneration, instability or primary hypermobility, which can be post-traumatic or generalized for medias, things like that. Hormonal imbalance or hormonal deficiencies, looking at autoimmune and immune type imbalances like MCAS. I really think of MCAS as an immune imbalance because there's usually a reason why it got triggered.

[00:07:59:07 - 00:08:19:21]
Speaker 1
Most of the patients that we're seeing aren't primary MCAS, which usually shows up in kids and they have anaphylaxis and things like

that. Looking at endometriosis, adenomyosis, hernias, interstitial cystitis, any of those primary things. And then primary neurologic, like a small fiber neuropathy, which again, calling that primary, often it's secondary to an autoimmune

[00:08:21:01 - 00:08:35:17]
Speaker 1
issue, doesn't have to be, or primary neuroprolatory vestibulodynia, something like that, which is primary neurologic process. So sort of identifying these different reasons for the pain and often these patients may have more than one. Oh, and then vascular pelvic congestion may thurner. Sorry.

[00:08:37:02 - 00:08:43:05]
Speaker 1
And you can probably think of things that you add to that list, but that's sort of just big categories that I'm thinking through.

[00:08:45:08 - 00:09:10:14]
Speaker 1
And then of course we want to identify the cascade of events, like the interplay between these structures, because that's also the ball that we have to unwind. I love analogies that you've seen from so far, what I've said. But I'll explain to patients, there's this jumbled knot, and you may see which thread to pull on first, but you don't necessarily know which thread to pull on next as we're unwinding how they got to be where they are, like this snowball going down a mountainside.

[00:09:11:22 - 00:09:17:23]
Speaker 1
And if you think of things like the hip, the hip will cause psoas tension. If there's anterior instability,

[00:09:19:05 - 00:09:28:00]
Speaker 1
you can see rumbar plexus or genitofemoral nerve entrapment from the psoas tension, which can mimic arthrenia and it can also cause genital pain, groin pain,

[00:09:29:00 - 00:10:04:15]
Speaker 1
and it can all be from the hip, even if they don't have hip joint pain. The hip will cause uptrader internus guarding, which can cause putinal neuralgia, and it can cause piriformis guarding, which can cause sciatica, and it can cause rotation of the ileum. So if you have an unstable hip or if you have impingement of the hip, the SI will adjust to stabilize the hip and to minimize the impingement. People don't do this consciously, but the body just naturally adjusts to be stable and more comfortable. But that ileum rotation it's going to

lead to sacrosanctal ligament thickening and tightening which can then put tension on the putinal nerve and cause putinal neuralgia.

[00:10:06:15 - 00:11:19:13]
Speaker 1
We'll see adductor longus strain, like sports hernia, athletic pubalgia, from an unstable hip, and that'll cause genital pain. And a lot of that genital pain I think it's referred from the periosteum strain at the pubis because otherwise I haven't identified a focal anatomic source that will cause that, but of course this can also directly irritate the spermatic cord, because genitofemoral nip's spermatic cord runs right on top of that adductor tendon right at the pubic symphysis. When you look at hernias, same thing, you can have these different things that happen as a result of hernias, can mimic hip pain and actually cause altered hip mechanics, and those altered hip mechanics will cause everything that happens with the hip above. You can have visceral pain with sensitization, and I've had a number of patients who come in with bladder frequency, urinary frequency and urgency, and it's inguinal hernias. And I block the inguinal hernias, and they don't feel that urgency. And the reason is, it's the visceral fat that's in the hernia site getting squished that's sympathetically sensitized, and it's just activating those hyperactive sympathetic reflexes.

[00:11:21:00 - 00:11:25:12]
Speaker 1
You prove it with a diagnostic block, you send them for hernia repair, boom, it's fixed.

[00:11:26:20 - 00:11:45:22]
Speaker 1
Acne is, of course, just guarding of the abdominal muscles, this will happen with endo2, and of course that will cause a lot of trickle down pain. Sacroiliac joint, I mean we see so much SI joint dysfunction, but what is that actual dysfunction? Is it primary joint arthritis? That's not very common. Sometimes it's inflammatory arthritis of the joint, that's when we get Dr. Nino involved.

[00:11:48:04 - 00:12:05:17]
Speaker 1
Often it's hypermobility of the joint, and it's funny because hypermobility will also often present as a stuck immobile joint just because that joint will fall into the end range of motion and it'll stick there, but in truth it's actually hypermobile, which is how it got to be in that position.

[00:12:09:00 - 00:12:13:21]
Speaker 1
Identifying all these things and understanding how and why is the key to treating it.

[00:12:14:21 - 00:12:52:18]
Speaker 1
And of course we see all these downstream effects from the SI joint. One of the biggest things is sitting in tolerance, so I see so much pudendal neuralgia from SI joint hypermobility so when they sit you get the shearing of the SI joint because it's been sprained or because they're hypermobile, and that shifting puts tension on the sacral ligament, puts tension on the pudendal nerve, they can't tolerate sitting. I will fill the SI joint with fluid to temporarily stabilize it, which will prevent it from shifting, and then they can sit without pudendal neuralgia, which proves that it's SI joint hypermobility causing that. And so then we can treat that with prolotherapy, PRP, things like that.

[00:12:53:19 - 00:14:01:10]
Speaker 1
Of course lumbar disc, it'll refer, it'll sensitize. If there's any disc herniation on the sacral nerve roots, then that's one side of tension on the pudendal nerve upstream so that it doesn't take as much tension downstream to cause pudendal neuralgia. So you're familiar with double crush, right? Cervical radiculopathy and carpal tunnel, double crush, the common story, it'll happen with an L5S1 disc on the sacral nerve roots, and then a separate maybe sciatic entrapment from puriformis, maybe OI, right? And you guys know this, you see it all the time, when people come in with pudendal neuralgia, it's often the straw that broke the camel's back, meaning there was already something pre-existing, and this one thing on top of it is what sent them over. So good story, like people come in after a UTI with pudendal neuralgia, right? But then you examine them, they have hip hypermobility or hip impingement, right? They'll have sacroiliac joint dysfunction, like there was already some underlying irritation to the pudendal nerve, and then they had a UTI which triggered everything, right?

[00:14:02:22 - 00:14:34:21]
Speaker 1
And so I don't think it was like that one, I mean it can, and it does happen, but it's difficult for that to happen, like it would have to be a really bad infection with a lot of pain to really sensitized the nervous system with that by itself. But often they have some underlying, maybe they had some dysmenorrhea before, right? Like maybe they have endo and nobody really diagnosed it, and their nervous system is already like borderline sensitized, but they kind of just lived with it because that was normal for them and they didn't know any better. But then they get this other thing that sets it off and it just goes over the threshold where now it's a big issue.

[00:14:35:22 - 00:15:05:15]
Speaker 1

So once you start to treat them, you start to recognize all these other things that are known to each by themselves cause pelvic pain, and once you start identifying, putting them all together, you start treating all these things. And a lumbar disc is one of those things, everybody has lumbar discs, right? But so few people have pudendal neuralgia because of a lumbar disc, but if they have a lumbar disc and they're having pudendal neuralgia for some other reason like hip impingement, it's usually some cumulative effect of both and not purely all due to one thing.

[00:15:09:07 - 00:16:04:10]
Speaker 1
Or at least I don't want to go to the assumption that it is that one thing. You know, you can start by treating that one thing and if they get better, great, that's it. But if they don't get better, they don't get fully better, then you really have to start reverse engineering all this. And of course endo causes everything. So if we think about 36 year old woman with hypermobility syndrome, hip labral tear, endometriosis, chronic migraine, she's coming in with right back hip leg pain, difficulty walking on the right, migraines flaring, like I have to think through all of these things, right? And that's really the process. I sort of go through all of these, through my exam, through the history, and in my mind I sort of put check marks to weight each one of these. So when we start going down a workup process, like which of these are most likely, which of these do we focus on, which of these do we refer out for sooner rather than later. Because, you know, each of these things I have my own scope in terms of how much I can do.

[00:16:05:19 - 00:16:17:00]
Speaker 1
So lumbar disc, easy. I can get an MRI and I can look at that and I can do an epidural to see if it's a lumbar disc, same thing, sacroiliac joint, I can examine them, I can block the sacroiliac joint, hip, I can do all of that. Myofascial pain, easy, right?

[00:16:18:00 - 00:16:36:14]
Speaker 1
If it's an endometriosis flare, that's kind of difficult or more difficult to pin down because that can be a lot of things and it's hard to isolate that from everything else that's happening. You know, doing lumbar sympathetic blocks is probably the easiest way to turn off most of that, but even turning off all of that is difficult.

[00:16:38:03 - 00:16:55:06]
Speaker 1
Same thing if there's triggered sensitization. I can do IV lidocaine, IV ketamine, sympathetic blocks to just desensitize them and see what's left. Kind of like knocking down the flames of the fire. Femoral hernia, same thing. I can examine them, I can look at the

ultrasound to see if there's a femoral hernia, I can do a diagnostic local anesthetic block in the femoral canal.

[00:16:56:20 - 00:17:01:00]
Speaker 1
You know, we can see pretty quickly what role each of these are playing.

[00:17:02:00 - 00:17:55:10]
Speaker 1
When it comes down to things like maythern, yeah, I can do a pelvic MRI, a pelvic vena gram and see if there's pelvic congestion, but at the end of the day you really need a vena gram. And so I work with a vascular surgeon who does this work up, so I would connect with him, he'll do a vena gram and see what's actually happening dynamically to see if we think that's a role or if we don't think that's a role. And again, if the treatment for maythern is a stent and committing someone to a stent, you really want to know that that is the thing that needs to be treated and it's not one of these other things first. So the prioritization process is really what I do. I try to line all these things up and understand the cascade of events and the priority of each of these things. And this is not a quick and easy thing. It's a process and it takes many visits to work through these things to really understand what will each of these things is playing for each patient.

[00:17:56:19 - 00:18:17:16]
Speaker 1
And this is what we do and this is kind of how I work. Now, if there's a specific consult, like, you know, sometimes Dr. Zolland will send a patient, for example, and he'll say, "Is a femoral hernia causing this patient's pain?" That's easy. I just do a femoral hernia block and we answer yes or no. But otherwise, if it's not, then it's the bigger picture question of what is and how do we sort this out?

[00:18:19:19 - 00:18:45:22]
Speaker 1
So going through the history, understanding how it started, how it evolved, what makes it better, what makes it worse, like all these very basic things that all of you ask all of your patients about each of their pains, right? We sort of just want to get an understanding of all of these things so like different data points will align with different etiologies with different likelihoods. And so far, AI hasn't been able to replicate this for us. Someday, hopefully it will. It'll make our job a lot easier, you know, give them an AI bot in the waiting room and then they just come in and say, "Oh, voila, you have this," right?

[00:18:48:01 - 00:18:52:05]
Speaker 1

But in the meantime, this is sort of the process that I go through trying to put all these things together.

[00:18:55:13 - 00:19:04:20]
Speaker 1
And this is all--it's probably common sense for all of you because as far as I understand, we kind of take a very similar approach to understanding a lot of these things.

[00:19:06:00 - 00:19:23:04]
Speaker 1
I'm happy to dig into any of these more if it would be helpful. If you kind of want to understand what I'm doing on physical exam, what I'm looking for or specific imaging things that I do or lab work up or how I approach diagnostic blocks versus therapeutic blocks, do you have any questions about any of this that you want to dive into now?

[00:19:27:18 - 00:19:31:13]
Speaker 2
What is the imaging that you do for dynamic hypermobility?

[00:19:31:13 - 00:19:49:04]
Speaker 1
So it depends on the part of the body. Like the neck is pretty straightforward, so we can do flexion extension film, so plain X-ray. If we're worried about craniosurfical instability, I can do odontoid views with odontoid side bending. So I can look for C1, C2, whether they stay together or whether they ring like a bell.

[00:19:50:10 - 00:20:17:22]
Speaker 1
For the sacroiliac joint, you can do a flamingo stand and look for motion that's asymmetric one side versus the other or pubic symphysis instability. You can do dynamic imaging for that. The hip, not so easy. There's really not great dynamic imaging for the hip. For the knee joints, we'll do standing, we'll do sunrise, but it really comes back to physical exam. The foot, like if you're looking for mid-foot instability, you'll get that on this weight-bearing X-ray.

[00:20:19:17 - 00:20:21:16]
Speaker 1
Spine, do flexion extension of the spine.

[00:20:28:18 - 00:20:35:13]
Speaker 3
I have a question. I don't know if you're going to like me or not, but... I love you, Cori. Nothing will ever change that.

[00:20:37:08 - 00:20:45:17]
Speaker 3

So from my clinical standpoint, what I mostly find on people is that they have this left SI joint that's usually stuck posterior,

[00:20:47:04 - 00:20:57:00]
Speaker 3
which a lot of times you've called the hypermobile side because it's like off its axis and it's moved posterior and has now gotten fixated there. What starts to happen though, so secondary,

[00:20:58:00 - 00:21:02:03]
Speaker 3
is that the right side then starts to swing laterally at the lower ILA.

[00:21:03:13 - 00:21:13:20]
Speaker 3
Because then that becomes a problematic issue because then now that's hitting the sciatic nerve and some of the posterior rotators and causing all sorts of pain down the right side.

[00:21:16:04 - 00:21:24:00]
Speaker 3
Do you have a hierarchy where you need to, "Okay, yes, we need to get the left SI joint more stable

[00:21:25:00 - 00:21:36:16]
Speaker 3
and get it going more into the forward position?" And then how do you manage now this secondary created hypermobility on the right side? And a lot of times that right hip also goes anterior.

[00:21:36:16 - 00:22:24:04]
Speaker 1
Great. So if we zoom out a little bit, the point you brought up is often pain is contralateral to dysfunction. And so this is where the physical exam comes in because that's how you pick this up. And then the dysfunction, why is that dysfunction happening? Did they sprain their left SI joint or are they hypermobile everywhere? Is it a focal joint that was just issued because they fell off of a horse and landed on their left buttock? Or is it more global, more diffuse? Because that's the decision to treat one side versus treating everything. If they're just hypermobile in general and they're having pelvic ring dysfunction, to answer your second question, I start with the pelvic ring. If the pelvic ring is not stable, nothing else stands a chance. So I would treat both SI joints in that situation.

[00:22:25:07 - 00:23:00:21]
Speaker 1
And if I'm uncertain to gain certainty, I either talk with the PT, I hear from you that that's what's going on, or I send them to a

chiropractor to do an adjustment. And if the chiropractor does an adjustment and they feel better temporarily but it doesn't stick, great. That really confirms that there is hypermobility. And then I'll do the prolotherapy shots in the sacroiliac joint to diagnostically fill the joint. Often while the joint is numb and it's full, it will reposition itself automatically and the patient will immediately be able to tell you, "Oh, that feels better. That feels normal. I feel stable." And I will not ask them for this. I will let them say that spontaneously.

[00:23:01:22 - 00:23:45:17]
Speaker 1
Because that's really an instinct to go off on a little tangent. How do you confirm that hypermobility is the problem rather than a pain? You fill the joint with fluid to stabilize it. So if the SI joint is unstable, fill it with fluid, stabilize it, anything downstream from that instability will be better. So if the question is, is the pelvic floor dysfunction from guarding an unstable pelvis ring, if you fill both SI joints with fluid and the pelvic floor relaxes, that's your answer. If it doesn't relax, that's your answer. So I kind of use all of these data points to put it all together to get them moving in the right direction, get all these things moving in the right direction.

[00:23:47:00 - 00:24:24:21]
Speaker 1
To really directly answer your question, I would pro-therapy both sacroiliac joints to one, diagnostically test them by filling them with fluid and seeing how they respond, seeing how much fluid they actually take, seeing how they feel while the joint is full and also numb. And then two weeks later, once the pro-therapy kicks in, seeing if they have a therapeutic response to pro-therapy. So we get the diagnostic value and then we get a potential therapeutic answer. I don't have that many tools for fixing hypermobility. Pro-therapy is the best tightening tool that I have. And for a fixed joint like the sacroiliac joint, that's kind of it.

[00:24:26:00 - 00:24:37:03]
Speaker 1
And if they respond to the pro-therapy, that's great. We keep going down that path. Usually it takes three, maybe four injections, but usually three is for most people what they need to stabilize it enough that then we can move on to other things.

[00:24:39:02 - 00:25:38:10]
Speaker 1
Now, downstream from that or upstream from that, is there anything that's pushing them into that posterior sacroiliac rotation? Are they having some hip joint dysfunction? Are they having back pain? Do they have a bertolotti? Is there something that's driving them to push the pelvis into that position? And this will happen sometimes too. They

may not have primary hypermobility. They might be a normal mobile person, which it seems like we never see those people nowadays, but they could just have hip impingement. And because of the hip impingement, they overuse the SI joint to accommodate the hip impingement, and they've developed hypermobility in the SI joint because of accommodation of the SI joint, of the hip impingement. In that situation, if I pro-therapy their SI joint, I might make their pelvic ring immediately better, but I'll make their hip impingement worse because then they can no longer compensate for that hip impingement. And that's happened a few times. And then you take that data point and you say, "Aha, your hip is the primary. This SI joint is secondary. We have to treat your hip and get your hip happy. Then we can come back to your SI joint, and that will get better."

[00:25:44:00 - 00:25:44:09]
Speaker 3
Thanks.

[00:25:45:17 - 00:25:46:01]
Speaker 3
Super helpful.

[00:25:47:17 - 00:25:49:17]
Speaker 3
I like how your brain works. Good.

[00:25:49:17 - 00:25:52:16]
Speaker 1
Good. Because I have no choice in the matter.

[00:25:55:03 - 00:25:57:08]
Speaker 2
All right. You remember? Oh, sorry.

[00:25:58:21 - 00:26:06:00]
Speaker 2
Can I ask one more thing before we move on? Please. Yeah, I was wondering if you could talk briefly about what you do when you're looking at hernias.

[00:26:07:00 - 00:26:11:06]
Speaker 1
Yes. All right. Perfect. Because it's B right here.

[00:26:12:13 - 00:26:44:10]
Speaker 1
So when I'm looking at hernias, first thing I do a physical exam, I press on them. And if they're sensitive, if they hurt, yeah, that gives me cause to investigate further. Usually the next step is looking at them with the ultrasound to see if there's fat in the canal

and to see if the fat dynamically moves with Valsalva, because that's a hernia. So if they have an act of hernia, I mean, that's a legitimate source of pain. Is it causing the pain they are having? That's still an unanswered question, because a lot of people have hernias that don't cause any pain or dysfunction.

[00:26:46:07 - 00:26:49:09]
Speaker 1
And hernias will cause three different kinds of pain.

[00:26:50:13 - 00:27:09:06]
Speaker 1
They will cause abdominal wall pain, because the abdominal wall is getting stretched because of their hernia. And sometimes the abdominal wall will react to the stretch, and they'll have muscle overuse, they'll have acne from the hernia. Especially if they have a really big hernia. Like, you see some of these people with hernias that are so freaking large, the hernias themselves don't hurt because they're so big.

[00:27:10:19 - 00:27:41:10]
Speaker 1
I'm sure you've seen these patients. Like, I've seen them. I'm, like, gagged, because basic-- and they'll come in with pelvic floor dysfunction because the abdominal wall is not doing its job, and the pelvis has to, like, hold everything together, right? And you have no hope of getting their pelvis happy until those hernias are fixed. So they don't have hernia pain, so you send them to a hernia surgeon, unless it's somebody smart who sees a lot of this, they're like, "I'm not operating on them." They have no hernia pain, even though they're huge, right? They're not obstructed, they're not having hernia pain. Why operate on them? They're benign hernias.

[00:27:42:11 - 00:28:50:01]
Speaker 1
So they can have-- Sorry, I got off on a tangent. They can have abdominal wall pain, and they can have acne secondary to the abdominal wall trying to hold it all together. Number two, they can have genitofemoral nerve pain. And for-- I mean, I'm specifically talking about inguinal hernias, but if they have femoral hernias, they can have femoral nerve pain if they have obtrader hernias, they can have obtrader nerve pain, right? There's always a nerve that goes through that hernia site that can be irritated from the hernia itself. So they can have nerve pain there. And three, they can have visceral pain from the viscera that's getting squished inside the hernia. So if there's a momentum in the hernia and it's getting squished, that can hurt too. And then that's when they'll have the bladder symptoms, that's when they'll have visceral pain, you know, that's-- and it's really poorly localized. And, you know, again, I've sent these patients to hernia surgeons and they're like, "This isn't hernia pain. They have urinary

frequency. They should have an IC workup," right? And I'm like, "No, I did the hernia block where I saw fat in the canal and their urinary frequency went away. This is hernia causing it," right? Like, this is visceral pain causing urinary frequency symptoms.

[00:28:52:14 - 00:28:54:03]
Speaker 1
So that's how I approach hernias.

[00:28:54:03 - 00:28:57:24]
Speaker 2
Well, so then if the block is effective, you would want them to get surgery.

[00:28:59:03 - 00:28:59:10]
Speaker 2
Generally.

[00:28:59:10 - 00:29:06:09]
Speaker 1
I mean, other times, I'll block the hernia and they're like, "Oh, yeah, that-- I was feeling that, but that doesn't really bother me. That wasn't really why I'm here."

[00:29:08:06 - 00:29:11:18]
Speaker 1
And it's helpful. And the other thing that's confusing with hernias,

[00:29:13:02 - 00:29:16:07]
Speaker 1
you can have endo on the round ligament in the hernia site.

[00:29:17:14 - 00:29:25:22]
Speaker 1
And you don't have to have a hernia to have hernia-like pain if you have endo in the site where a hernia would be.

[00:29:27:14 - 00:29:58:02]
Speaker 1
It doesn't happen often, but I've seen it a few times. And if I happen-- the one time I caught it on a patient, it's because I happened to catch her during that menstrual phase where the endo was swollen. And I had looked at her inguinal canal so many times because she had persistent pain, you know, between periods, but it was just like before, during period, where it was the worst, so, you know, it was the endocycle. But I just happened to look at it during one of those times and I see this big swollen mass, and I'm like, "Great, you have an endometrioma in your inguinal canal."

[00:29:59:10 - 00:30:02:00]

Speaker 1
 Right? So, like, a hernia surgery is not going to fix that.

[00:30:03:02 - 00:30:05:20]
Speaker 1
 You need someone to actually go in and take out the round ligament.

[00:30:07:12 - 00:30:20:16]
Speaker 1
 And again, that's not a standard place that hernia surgeons-- or that endo surgeons look, right? Like, they're not going into the inguinal canal because it's usually a closed-off space, so they need a really good reason to dig into some-- you might look to see if there's hernias, but again,

[00:30:22:00 - 00:30:24:05]
Speaker 1
 if there's no hernia, you're not going to see it.

[00:30:28:02 - 00:30:28:14]
Speaker 2
 Thank you.

[00:30:30:11 - 00:30:31:04]
Speaker 1
 All right.

[00:30:32:17 - 00:30:34:00]
Speaker 1
 The sympathetic nervous system,

[00:30:35:05 - 00:30:48:19]
Speaker 1
 there's medications I'll use to test it. There are IV infusions I'll use, and there are sympathetic nervous system blocks. And then, you know, if we need to do a spinal cord stimulator, that's sort of like the end of the line for that.

[00:30:49:23 - 00:30:52:00]
Speaker 1
 Hernias, we talked about hips are pretty straightforward.

[00:30:53:06 - 00:30:54:04]
Speaker 1
 Again, if it's hip--

[00:30:55:05 - 00:31:28:22]
Speaker 1
 I'll go off on the hips for a little bit because you guys see enough hip, you'll get this. So many people have labral tears. The question

is, why do they have a labral tear? If there was a singular traumatic event, great. That can cause a labral tear. That makes sense. If there's any underlying hip pathology that's maintaining it, like a camera pincer or instability from a sprain, we have to address those things. Otherwise, the labral tear is never going to feel better. Otherwise, if they come in with a labral tear, they're either hypermobile or they have camera pincer or they have both.

[00:31:30:01 - 00:31:31:12]
Speaker 1
If they have a camera pincer,

[00:31:32:14 - 00:31:55:07]
Speaker 1
is it bad enough that it needs surgical correction? We get an MRI and we look at the cartilage surface. If there's cartilage erosion of the joint, they need surgery to shave down that camera pincer. Otherwise, they're going to progress and need a hip replacement at an early age. The age of presentation makes a difference. If they're 20-something and they have cartilage erosion, they need surgery. There's really no way around it.

[00:31:56:14 - 00:32:18:01]
Speaker 1
Yes, PT will help them optimize the mechanics around the hip, but the dysfunction of the mechanics around the hip is because of the impingement. To correct their mechanics, they're going to be really putting them back into an impingement position. There's not a good fix. Until the bony contour is corrected,

[00:32:19:01 - 00:32:24:04]
Speaker 1
it's really hard to get their mechanics optimized. There's going to be some compensation maneuver that they're making.

[00:32:25:05 - 00:32:54:19]
Speaker 1
I really advocate if there's cartilage erosion, getting them to a good surgeon sooner rather than later so that can be corrected and then they can get on the right path to treatment. Otherwise, you're beating around the bush and you're wasting time. If they're 40 and they're coming in, they're not generally going to do a scope to reshape the hips. They're kind of stuck with the anatomy they have. Then we try to optimize it. I'll use hyaluronic acid in the joint as a lubricant so they don't rub as much. I'll do PRP to try and get some regeneration, but they're just going to rub it back down anyway so it's not a long-term fix.

[00:32:56:12 - 00:33:23:12]
Speaker 1

We'll PT optimize as best we can, but it's really just optimizing compensation patterns because you can't get them into perfect hip mechanics. If you disagree with this, please, I welcome the conversation here because I want to learn more about this. If you found a way to get them into proper hip mechanics when their hip anatomy is not optimal, I feel like it's a difficult fight and you just keep going down the same path and you don't make any progress.

[00:33:25:09 - 00:33:32:19]
Speaker 1
If there is impingement morphology and they're young, they need surgery. If there's impingement morphology and they're old, then you supplement and you optimize.

[00:33:34:00 - 00:33:53:11]
Speaker 1
If there's no impingement morphology and they're just hypermobile, then you do prolotherapy and PRP to treat the hypermobility piece and tighten up that capsule and you have to unwind their mechanic. This is where PT is essential too. If you see someone with a hypermobile hit, they need Pilates, they need retraining of their hip motion.

[00:33:54:17 - 00:34:40:05]
Speaker 1
If that by itself is enough, great. But if they're still having labral pain, if they're still having nighttime pain, if they're still having pelvic pain, there's a component of instability that's rearing its head when the muscles aren't compensating. Some patients, even with the best compensation in the world, they still end up overusing those muscles because then the muscles are used for stabilization of the joint rather than mechanics of the joint. The muscles are really getting overworked because they're having to do a job that they're really not supposed to have to do. If they don't have to rely on the muscles to stabilize the joint, if the muscles can just work on function of the joint, then if the ligaments are doing the job of stabilizing the joint, then the muscles are much more free to do what they need to do and they're less likely to get muscle overuse syndromes like piriformis, like outtrader internus, like bursitis.

[00:34:42:14 - 00:34:43:09]
Speaker 1
Do you guys agree with that?

[00:34:46:05 - 00:34:52:22]
Speaker 1
That's mostly what I'm doing. It's clarifying which category they fall into with the hip and what's the best approach for that hip.

[00:34:54:03 - 00:35:10:00]
Speaker 1

Trigger points. If someone has a tight muscle with a localized twitch response and referred pain, I'll put a needle in it and release it. And if they feel better, amazing. If it comes back within two weeks, there's a reason why they're having those trigger points. I know you guys have patients that get needling, right? Dry needling.

[00:35:11:13 - 00:35:27:21]
Speaker 1
A trigger point that's a primary process will resolve and go away and not come back. If it comes back within two weeks, there's some reason for it that needs to be diagnosed and treated. Otherwise, you're just using up their acupuncture visits and you're going to make a lot of money off the insurance, but the patient's not going to get any better.

[00:35:29:03 - 00:36:30:03]
Speaker 1
So I'll use trigger points as a test to see what the muscle is doing because I've done enough of these. When I put a needle in the muscle, I can tell you, is this a guarding muscle? Is it a dystonic muscle? Two different things, right? Or is it a trigger point? Or is it just a tight muscle for some other reason? You really understand and you guys are the same. You can feel the muscle and you know why. You can feel by the way the muscle acts, like what's going on with that muscle, right? You can tell by how it responds to your treatments. Is there a trigger point there? Is there guarding there? Is there primary dystonia there? And then based on that, we'll choose the next course. If there's a primary dystonia, I'm going to go talk to that muscle. If it's guarding, I want to understand why it's guarding. And sometimes, if you take a guarding muscle and release it, you'll unmask the reason why it was guarding. So this is another good hip story. Someone comes in with a tight piriformis, tight iliopsoas, tight obtrader internus. I mean, I can tell you they're guarding their hip. That's the constellation, right? That's the only reason you get these three muscles active together. It's the hip.

[00:36:31:08 - 00:36:52:03]
Speaker 1
Why are they guarding their hip? What's going on with the hip? Sure, that's what I want to figure out. But if I don't necessarily recognize that it's a hip and I'm like, "Oh, their OI is tight. Let me release it," right? And then their hip flares, well, voila, they were guarding their hip, right? Then you know. Then you know you have to treat the hip. And then once the hip is happy, then you can circle back and unwind these muscles, and then it'll actually make progress.

[00:36:54:04 - 00:36:57:24]
Speaker 1
I have other patients. Like, this is the unfortunate thing that we end up seeing.

[00:36:59:04 - 00:37:00:23]
Speaker 1
She has EDS, awful EDS.

[00:37:02:04 - 00:37:10:17]
Speaker 1
Her knee had anterior-posterior instability. And guess what? Her IT band was tight. Shocking, right? Hamstrings are tight, shocking.

[00:37:12:12 - 00:37:29:14]
Speaker 1
I actually had two patients, same situation. One patient went to the chiropractor, "All right, your IT band is tight. Let me work that." So they massaged the heck out of it. They grasped in it. She bruises everywhere. And guess what? The next day, she gets up out of bed and goes to walk, and she tears her meniscus.

[00:37:30:23 - 00:37:44:23]
Speaker 1
Why? That IT band was serving a purpose. The tension in that muscle was serving a purpose. It was stabilizing her knee because her knee was intrinsically unstable. But the provider just saw a tight muscle, and they're like, "Oh, that muscle's tight. It shouldn't be tight. Let's loosen it."

[00:37:45:24 - 00:37:53:20]
Speaker 1
But you always have to ask, like, "Why is this happening? What's the bigger picture?" And another patient who went to an orthopedic surgeon instead and released the IT band.

[00:37:55:10 - 00:38:13:02]
Speaker 1
So now her knee is completely unstable. Like, her ACL, her PCL are shot. Like, she's walking on crutches, right? And because she has EDS, no other surgeon wants to go in and graft her ACL PCL because they just don't do well with surgery. And I'm like, "Why did you--" Why-- and, of course,

[00:38:14:05 - 00:38:21:09]
Speaker 1
you know, those of us who recognize these patterns are the ones left treating it because no one else wants to treat it, and they don't know what to do with it anyway.

[00:38:22:13 - 00:38:28:14]
Speaker 1
So looking at the muscles, acknowledging the constellation of muscle activation,

[00:38:30:10 - 00:38:37:01]
Speaker 1
 understanding how they came to be active in that pattern and what's driving that pattern is the goal of treatment.

[00:38:42:13 - 00:38:45:22]
Speaker 1
 All right, medications. Sorry, that was a lot. Any questions with any of this?

[00:38:50:10 - 00:38:51:00]
Speaker 3
 Oh, I'm sorry.

[00:38:51:00 - 00:38:51:14]
Speaker 2
 All right.

[00:38:51:14 - 00:38:53:14]
Speaker 3
 Yeah. So,

[00:38:54:23 - 00:39:33:05]
Speaker 3
 you know, we have a lot of these patients who come in with cam and pincers, right? But, like, I'm kind of--in my head, I'm kind of like, this is just a symptom of something that's probably been going on for a really long time. Like, they've had impingement. It's almost like the pearl in the oyster. You know, it's like, now you've made a callus because, like, the bones have been hitting for some time now. And so that's kind of like the-- And so that's kind of like an unfortunate event because it's like, okay, now you have a mechanical restriction that now is going to cause you to compensate when maybe we could have primarily had, like, helped you out in the beginning if we were able to identify, like, why your hip was pinching in the first place, which could be, like, you know, lumbar issues, SI issues, you know, whatever.

[00:39:35:23 - 00:39:47:13]
Speaker 3
 So in those cases, like, I mean, are all-- if you find that someone has a cam pincer and they have pretty significant impingement at this point, like, are you saying that, like, they really should probably get that shaved down sooner rather than later?

[00:39:49:01 - 00:39:52:11]
Speaker 1
 If they have cartilage erosion on MRI, yes. Cartilage erosion, okay.

[00:39:54:03 – 00:39:58:01]
Speaker 1
Because we have a lot of hypermobile patients who have CAM morphology.

[00:40:00:06 – 00:40:14:12]
Speaker 1
And at the same time, like, when I was at the VA, I would see 70, 80-year-old patients who have CAM and pincer morphology, but they don't actually have any hip pain. So there's a subset of people who live with this that never really develop impingement.

[00:40:16:06 – 00:40:27:03]
Speaker 1
But if they're developing impingement, and the impingement is building on itself, just like you're describing, we'll see that on the imaging, right? We'll see the subchondral cyst on the CAM. We'll see the calcification of the labrum.

[00:40:28:20 – 00:40:43:20]
Speaker 1
So the question there is, are they cartilage erosion? If they are, then it needs to be addressed. But the other piece, if they're hypermobile and they have the morphology, I will often treat the hypermobility first because there's a subset of people with the morphology that don't impinge.

[00:40:45:14 – 00:40:50:17]
Speaker 1
So if they're having labral pain because of the hypermobility and they just happen to have CAM,

[00:40:53:10 – 00:41:01:00]
Speaker 1
I'll treat the hypermobility first, take that out of the picture, get them in PT so their mechanics are optimized, and see how they do.

[00:41:05:07 – 00:41:06:03]
Speaker 3
Got it. Thanks.

[00:41:12:10 – 00:41:13:21]
Speaker 1
All right. Medications.

[00:41:15:07 – 00:41:18:00]
Speaker 1
I think of medications like spices in your cabinet.

[00:41:19:05 – 00:41:32:05]

Speaker 1
 It's good to have a lot of different spices, and you want to know what each of them tastes like by themselves, and you want to know how to dose each one of them individually. But when you go to cook, you usually want to use a few different spices together.

[00:41:34:01 - 00:41:36:09]
Speaker 1
 So with medications,

[00:41:38:01 - 00:41:57:14]
Speaker 1
 I'll learn a little bit about what's going on with your body by each medication that you try and how you respond to it. Whether it's a side effect or whether it's a benefit, I will kind of know which pathway to exclude or which pathway to lean into in terms of like neural chemistry.

[00:42:00:00 - 00:42:04:20]
Speaker 1
 So if we think about steroids or anti-inflammatories,

[00:42:06:11 - 00:42:17:03]
Speaker 1
 certain kinds of pain don't respond to anti-inflammatories. So like sympathetic nervous system sensitization doesn't respond to NSAIDs.

[00:42:18:03 - 00:42:25:01]
Speaker 1
 Hypermobility pain by itself generally doesn't respond to steroid or NSAIDs. Think about patients--

[00:42:26:01 - 00:42:35:22]
Speaker 1
 I want to say raise your hand, because think of the patients with labral tears who have had a steroid injection in their hip. How many of them got better from the steroid injection in the hip for a labral tear?

[00:42:40:13 - 00:43:03:08]
Speaker 1
 Almost never, right? Like at best it helps for two weeks, and then it's right back where they started. And in that case, it's probably because they happen to have a little bit of degenerative irritation on top of a labral tear. Same thing with knee meniscus pain, right? Like someone comes in with an acute meniscus tear, and their knees all swollen and angry, and they get a steroid injection, and it does nothing.

[00:43:05:12 - 00:43:16:23]

Speaker 1
Because it's not an inflammatory-- it's not like a true inflammatory process. So if I'm suspicious of an inflammatory process, I will often give them a steroid or NSAID trial.

[00:43:19:23 - 00:43:25:01]
Speaker 1
And if they respond, I kick them over to Dr. Nino. We want an autoimmune workout.

[00:43:26:07 - 00:43:37:24]
Speaker 1
For the sympathetic nervous system, like if their fight or flight is overactive, I'll give them clonidine, crapremal, tizanidine, and see how they respond. If they like it, if things calm down, that really confirms that their sympathetic nervous system is hyperactive.

[00:43:39:17 - 00:43:44:18]
Speaker 1
Same thing with all of these other things. Like little tricks, little things I'll try that will give me feedback

[00:43:47:01 - 00:43:48:18]
Speaker 1
as to what's going on.

[00:43:49:21 - 00:43:52:12]
Speaker 1
I'm going to speed up a little bit since we only have 10 minutes left.

[00:43:52:12 - 00:44:00:01]
Speaker 2
My question, clonpretylol is usually PRN. So you give it like daily, or how does that work?

[00:44:00:01 - 00:44:07:12]
Speaker 1
No, we give it PRN. Because if they break it and they feel better, it's doing something. They don't need to be on it for any duration of time for it to work.

[00:44:08:13 - 00:44:08:18]
Speaker 1
Okay.

[00:44:10:01 - 00:44:29:01]
Speaker 4
I also wanted to give Dr. Nino and Dr. Kane a chance just to say hi really quick, just to show their face. I don't think anybody has ever

met them before. And I think it's helpful that you just mentioned that they could refer to Dr. Nino as well. Before the end of the call, just for like 10 seconds, they can introduce themselves.

[00:44:29:01 - 00:44:32:03]
Speaker 1
Why don't we do that right now? That'll give me a little break.

[00:44:33:12 - 00:44:44:04]
Speaker 5
All right. Dr. Kane here. Sorry, I was seeing a patient and I ran over a little bit. So, yeah, I do a lot of these things at the Manhattan Pain Medicine,

[00:44:45:08 - 00:45:00:15]
Speaker 5
focusing mostly on the joints and a little bit less on spine. But we all kind of work as a team to figure out what's going on. So, yeah, I do mostly the regenerative in that hypermobility space.

[00:45:01:19 - 00:45:05:00]
Speaker 5
And it seems to work pretty well.

[00:45:06:01 - 00:45:17:03]
Speaker 5
And if we're not getting a response, there's always different ways we can approach our injections as well as use of medications.

[00:45:18:05 - 00:45:20:14]
Speaker 5
All right. Dr. Nino.

[00:45:20:14 - 00:45:23:07]
Speaker 6
Hi everyone. Good afternoon.

[00:45:24:16 - 00:45:37:07]
Speaker 6
Dr. Nino here. I know some of you, but not everyone. It's nice to meet you. I see like 15 participants here. So, yeah, we work very closely with Dr. Superman, Dr. Kane, with Pain Group.

[00:45:38:16 - 00:46:58:04]
Speaker 6
Yeah, rheumatology is a broad field, as you can imagine. Like, it's a specialty that deals all autoimmune inflammatory conditions. There's like 20 or over 20 diseases that we screen, that we do a very detailed evaluation, good history, physical exam, very extensive blood work. And then we come up with, and also imaging, ultrasound, X-ray, MRI,

everything together. And then we usually come up with a diagnosis, if anything, and then we treat accordingly. There are like different treatments. Dr. Stifferman already discussed some of the treatment that also applies to rheumatology, but there are many more. It's like a separate talk about it, you know, that we have like the biological treatment, injectable infusion therapy that is more targeted to all of these disease-specific conditions. And then we offer the treatment here in Manhattan, up in medicine, and then, you know, that's how we approach our patients. So, if you think any patients qualify for our evaluation, we are available, we are full-time here, and then happy to see them and offer any sort of medicine, rheumatology help.

[00:46:59:11 - 00:47:09:07]
Speaker 1
So, I'll give you a good example. We're preparing a case series of pudendal neuralgia, secondary to psoriatic enthesitis, where the thicker spinous ligament attaches to the ischial spine.

[00:47:12:06 - 00:47:38:18]
Speaker 1
So, as you guys know, steroids don't generally work for pudendal neuralgia, but if there's an inflammatory site of irritation spilling over and affecting the pudendal nerve, and you put steroid at that site, and it's helpful, there's a reason. So, we have an interesting case series of patients that we've diagnosed with psoriatic arthritis based on their pudendal neuralgia responding to a steroid, and us working up the reason for that happening.

[00:47:38:18 - 00:48:19:10]
Speaker 6
Yeah, and interestingly, those patients have mostly psoriatic, it's not like significant psoriatic arthritis, but by definition, if you identify enthesitis, and most of the time, enthesitis can be like, you know, inflammatory, and in those people who already have psoriasis, you know, it makes sense to treat those patients, like you are treating psoriatic arthritis, and not to like apply only topical, or more like superficial treatment that, you know, only covers psoriasis in part, you know, you do more deeper treatment, which is more, you know, the targeted therapy that I was referring for those patients, basically, you diagnose psoriatic arthritis.

[00:48:21:01 - 00:48:26:11]
Speaker 6
So, we hope that our work will be, you know, recognized and published soon.

[00:48:27:22 - 00:48:33:01]
Speaker 6
So, we'll learn something new.

[00:48:33:01 - 00:48:36:02]
Speaker 2
Thank you for that.

[00:48:36:02 - 00:48:46:18]
Speaker 3
So nice to have you. I just have a question about mast cell activation. Are any of you managing that? I know it overlaps a lot with a lot of the room a lot.

[00:48:46:18 - 00:48:48:22]
Speaker 6
Yes, I am managing mast cells. Yes.

[00:48:50:01 - 00:48:51:11]
Speaker 6
It's now.

[00:48:51:11 - 00:49:14:21]
Speaker 1
Dr. Nino does the full workup and treatment of MCAS, you know, more thoroughly than any of the immunologists we worked with. Before I had Dr. Nino, of course, I, you know, had to deal with a lot of these cases, and finding someone to adequately address it with, you know, thoroughness and conscientiousness, it's hard to find. Dr. Nino does it better than anyone we found. Thank you for that presentation.

[00:49:16:01 - 00:49:20:10]
Speaker 1
She also does small fiber neuropathy diagnosis and workup.

[00:49:21:11 - 00:49:25:03]
Speaker 1
So, if anyone's concerned about small fiber neuropathy, and she'll also do POCS management.

[00:49:26:12 - 00:49:33:15]
Speaker 3
Well, we'll have to have you back, Dr. Nino, because I think a lot of us are very interested in those things. So, we'll be reaching out. Sure, sure.

[00:49:33:15 - 00:49:38:19]
Speaker 6
Yeah, so I was really not a bit unprepared for this, you know, today.

[00:49:40:01 - 00:50:00:21]
Speaker 6
You know, meetings, so I do have some muscle and small fiber presentation, maybe at some point we'll accordingly, you know,

schedule our talk, and I can give you guys some, you know, some insight about that, you know, topic. We'll do some talk.

[00:50:03:01 - 00:50:29:09]
Speaker 1
So, let me wrap up my piece real quick so we can have some questions. In general, my approach with patients is to understand the how, what, and why of the pain, and simultaneously try to get them comfortable. So, you know, it's a process to work up and understand, and I need to also give them some things to make them feel better while we're going through that process. So, there's this sort of dual path that we're going down simultaneously.

[00:50:30:19 - 00:50:33:15]
Speaker 1
And of course, we access medication, the different treatment buckets, medications,

[00:50:34:21 - 00:50:47:02]
Speaker 1
physical modalities like PT, chiro, acupuncture, things like that, pain psychology, which of course is essential for so many of these things, and procedures, which is what I'm here for, right?

[00:50:48:11 - 00:50:54:04]
Speaker 6
And lastly, nutrition medicine also, it is part of like very, very important and, you know,

[00:50:55:10 - 00:51:10:13]
Speaker 6
also part of the whole treatment goal, because a lot of times people should understand like what anti-inflammatory diet is, what is low histamine diet is. So, you know, kind of like having all together really makes an impact and change for these people.

[00:51:13:16 - 00:51:34:18]
Speaker 1
So, in terms of procedures, generally anything that's offered, we do. If you have any questions or if you're curious, we can go into more depth on any of those. And then I'll run through these real quick. So, these are the questions that were given to us before. I'd love to hear about what they find effective for EDS hypermobility patients. Really, it's prolotherapy,

[00:51:35:19 - 00:51:51:01]
Speaker 1
possibly PRP or hyaluronic acid, and polities with, you know, focus on postural training and reversing some of the synergistic compensatory patterns that occur, you know, in an anti-gravity

pattern.

[00:51:52:12 - 00:51:54:05]
Speaker 1
Our protocol for ketamine.

[00:51:55:11 - 00:52:48:21]
Speaker 1
I do ketamine very like case by case, and it really depends on what the patient wants to accomplish with the ketamine. The doses needed for pain are different than depression, are different than PTSD. And often each patient has some combination of all of these, and we'll target different things with each treatment. And when we start, it's always sticking the toe in the water to get the temperature and make sure they can tolerate, you know, going up into the stratosphere before they go into outer space, before they become a full-on space cadet, and seeing how they respond to each of those treatment levels, and then sort of crafting a treatment that suits what we're trying to treat. And at the same time, it's not just ketamine. We'll use lidocaine, magnesium, clonidine. We'll usually make a cocktail depending on what we're targeting, just to make sure they get the best benefit from it.

[00:52:51:01 - 00:53:16:04]
Speaker 1
Opioids we'll use for short-term acute pain after surgery or after an acute injury is a good example. But generally, we don't use long-term opioids, and anyone who comes in on a long-term opioid, we're focused on how do we better treat the pain and remove the opioid from the system, because opioids make things worse, especially if there's sympathetic nervous system sensitization. It's gas on the fire.

[00:53:18:01 - 00:53:44:22]
Speaker 1
How do we use injections for central nervous system calming? This is where... So if we focus in on the pelvic area, because that's your main area, there are three sympathetic ganglia that get our direct attention. One is the lumbar-sympathetic plexus, which is around L2-3. The other is the superior bigastroplexus, which is around L5. And then the final is the ganglion impar, which is right in front of the tailbone.

[00:53:46:01 - 00:53:54:19]
Speaker 1
Depending on the areas that are sensitized, we will choose which one or which ones to block first and kind of go from there.

[00:53:56:20 - 00:54:00:00]
Speaker 1
And then at what point do we incorporate pain psychology at any

point?

[00:54:01:02 – 00:54:23:08]
Speaker 1
Anyone who needs help thinking through what's going on, even if it's strategizing care, like a lot of these patients have multiple doctors, multiple conditions, sometimes making decisions about what to do next is difficult, let alone their feelings about all these, or managing their family, or managing work, or any of these other related things.

[00:54:24:12 – 00:54:29:09]
Speaker 1
But there's often benefit from pain psychology just to help process.

[00:54:30:17 – 00:54:31:07]
Speaker 1
Any questions?