Dr. David Hanscom

BACK IN CONTROL

A Spine Fellow's Perspective on Chronic Pain

An interview with Marc Moisi, M.D.
on Back in Control Radio with Dr. David Hanscom

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Tom: Welcome everybody. I'm Tom Masters, your host for another episode of **Back in Control Radio** with Dr. David Hanscom, where leading lights in the U.S. and around the world share important new thinking and strategies for the challenge of chronic pain. David, I understand you have a special guest with you in the studio today.

David: I do. He's one of my favorite people. His name is Marc Moisi, and he's a neurosurgeon and Chief of Spine Surgery at Detroit Receiving Hospital. We go back a long way, probably five or six years now. He was one of my fellows*, and we're very proud of what he's done, what he's accomplished. He is a superb surgeon and he's also been extraordinarily open to learning and teaching. I brought Marc on today for, hopefully, the first of many future podcasts, because right now he is actively training many neurosurgical residents and fellows. He's in the trenches as chief of neurosurgery at Detroit, and he has a lot going on, but I wanted him to discuss his background, how he came into our program at Swedish in Seattle, and some of how his thinking evolved. Welcome Marc.

Marc: Thank you so much for having me. It's an honor and a privilege to collaborate with you again, Dr. Hanscom.

David: So Marc, just give us a little background about how you found out about Swedish, where you were in your training when we first met, what was your general view of surgery, indications, performance, etc. What was your general outlook at that point when you first started—how many years ago now? Was that six years ago, four years ago?

Marc: It's six years. We met in January of 2013, when you interviewed me.

David: Okay, wow.

Marc: Yeah, it's almost a lifetime ago at this point.

David: One of us is getting old quickly here aren't we?

Marc: Well yeah, you know, so back when we met in 2013, I was a resident and as many residents in the U.S. studying neurosurgery, you know, our training doesn't revolve just around the spine. Right, we take the entire neuro axis. And that's no different than orthopedic training, you know, you choose to subspecialize in something, you know, you deal with, in orthopedic surgery you would deal with all the bones and in neurosurgery you deal with all the neuro axis.

But as you've taught me, and we've discussed this through the years, this isn't a one dimensional program. When you look at the spine, it's something multi-disciplinary. When you start looking at it as a resident, you see the nerves, you see the bone, and you see the pathology. But then, low and behold, we start talking to the patients and realized how different that is. *It's not fixing a picture, but treating symptoms and helping a patient change their lives for the better.*

When I initially was trained, what I used to see was that the *patient has symptoms, the patient has this on a scan, let's go fix it in the operating room*. My process was *"okay, great, this is really easy; I see something on a scan, I talk to the patient and next thing I know, I fix it."* But looking through my past and seeing how some of these patients did, the one problem with residency is you don't get that three-month, six-month, or six-year follow up with your patients.

David: Right.

Marc: All you get is a three-to-four day, maybe a two-week, maybe a four-week recovery period. And you say, *"Hey, what I did was a great job,"* but when you look at these patients long term that may not necessarily be the case. And having had a very distinct interest in the biomechanics of the spine, I sought out a place where I could really learn about it. The way I did that was I reached out to the Swedish Neuroscience Institute and fortunately you and the rest of your partners and colleagues took me on, and the rest is just history at this point.

David: Now that you've been in practice a couple of years, when you think back, you're right, *residency training takes a very small snapshot of a patient's life*. I will tell you as an orthopedic resident, I was not really trained in non-operative care, and I also had no clue how important non-operative care was in surgery. As a surgeon, it seemed to me that I was just one of the tools that we used to solve a patient's problem—but that approach was when I started out, and still is, taken in isolation, and so ultimately really wasn't that effective. What are some of your paradigm shifts as far as the non-operative care paradigm?

Marc: It's a complete 180. Now I actually spend my time in clinic trying to convince patients that they *don't need* surgery rather than that they *need* surgery. And one mantra that we kind of live by is that *the decision is more important than the incision*. You've always taught me that with enough training, most surgeons will be able to complete any surgical procedure that they've been trained to do. Now, choosing the right patient and getting phenomenal outcomes is something that isn't as easily trained—and *that's through experience.*

David: Right. What's happening in medicine in general, is super-specialization. We tend to, as surgeons, say, *"Well, rehab is part of his primary care physician's role, and we'll take care of the surgical role."* But, you know, I keep reminding myself and my Fellows that *we are physicians, we are not technicians*.

In internal medicine, there is a much longer time frame of follow up with patients, so I adapted that to my surgical practice and always follow my patients indefinitely. I never stopped following patients, and fortunately most of them did well and stopped coming back. But if a patient did poorly, I get to live with them forever.

I see that the trend for surgeons *not* to follow patients beyond three months post-surgery becoming more and more the standard of practice. Now the normal expectation

for surgical residents is that once surgery is done, and with follow-up limited to three months, regardless of how the patient is doing, you're done, right?

Marc: I completely agree. That's unfortunately coming into our healthcare system. But one of the things that you asked me was how my practice has changed. My practice itself is a multidisciplinary practice where it's not just me, it's not just the pain specialist, and it's not just the internist. It's a patient centric practice where I tell all my referring physicians*, "I want to meet the patient from day one."* And that doesn't mean I'm going to offer him surgery. I'm just going to be their cheerleader and push them in the right direction to optimize their care, whether it's through pain control, whether it's through using people like Dr. Howard Schubner who I work with very closely in Detroit, or whether it's physical therapy. Ultimately the goal is not to fix a scan but to fix their symptoms and improve their quality of life.

David: Yes, I think we've also learned that often times these bone spurs have been there for many years, but the symptoms may have started just a few months ago. Something changed. And what I find (and I only figured this out in the last ten years) is that people have unbelievable situational and environmental stresses, so what's changed? The bone spur is still there, but *what's changed is the body's chemistry around stress*. And to just ask a simple question about what's going on is pretty critical. Again, in medicine these days we're not really given the time to talk to the patient. In fact, we're actually discouraged from talking to our patients.

I don't know what it's like in your town, but there is also in many places, if not most, a very strong trend to make the surgical decision on the first visit.

Marc: I agree. I think it goes back to your initial statement that we're not given enough time. So instead of spending the time in learning what's going on in the lives of the patient, we tend to hurry it up, see if the symptoms match the scan, or even worse, there are some practices that won't even see the patient if they don't have a scan or don't have pathology on a scan.

David: Right.

Marc: Then at that point, these patients are painted against a wall and they have no out. They have no way of getting better and they don't know what's going on. The physician that they trust to give them an opinion won't even see them, so what are they supposed to do?

David: I'm one of those surgeons who has been on both sides of the fence. I came out of my Fellowship on fire and I felt guilty if I couldn't do that surgery. I'd make the decision on the first visit. *Seattle had nine times the rate of spine surgery per capita as any place in the country when I first started, and I was a zealot. I thought that we needed to do surgery on everybody.* I didn't have a clue about non-operative care, and so I feel great about being a part of your training to help you see that perspective much earlier than I did. I really spent at least eight years doing this aggressively, and I just couldn't figure out why everybody wasn't doing just perfectly well, since I had done the definitive

operation. So it's great to see you adopt that so early on in your career, plus you're in a hugely responsible position for training—how many residents are you training right now?

Marc: We have 14 residents—two a year in our program, and it's a seven year program. And we're actually looking to opening up possibly even a Fellowship program at some point.

David: Can you give us some examples of situations you've seen where surgical decisions are made on the first visit? I know there are a couple cases in which you actually, as a resident, stopped the process.

Marc: Yes, absolutely. You know, both as a resident and as an attending, I can give you numerous examples. One that really struck a chord with me was a young lady who had a car accident and was told at an outside hospital that she needed a fusion. She had some neck pain, but on the actual MRI that I reviewed with her, there was just a little bit of inflammation, there were no fractures and nothing else going on. And she was told she needed a three level fusion at that point, which, you know, for the layman, that's putting in screws and rods and changing the biomechanics of the spine to stabilize it if necessary.

David: Right.

Marc: So, my first question with her was, you kind of hit the nail on the head a couple minutes ago was, "What's going on in your life?" And she starts, "You know, I actually got into a car wreck, my daughter was with me, it was horrible." And I said, "Yeah that sounds pretty significant." And I asked her a very simple question. I said, "Do you drive now?" She said, she just looked at me in total surprise and said, "Why would you ask me that?" Well I said, "You know, first answer the question." She said, "Yes." I said, "Well, when you're driving do you white knuckle?" And the look on her surprise completely doubled. She said, "How did you know?" And I said, "Well when did that start?" She said, "Since the car accident." Well, I said, "You know, I want you to trust me that you do not need a surgical intervention at this time—or maybe ever. And just try a different type of therapy." She went to see our colleague Dr. Howard Schubner and after three months, she came with a wide smile on her face and said, "I am pain free." I said, "Well do you still white knuckle when you drive?" She said, "I haven't in weeks."

David: Wow. What was the essence of what he did with her? Did he share with you some of the things that he did with her?

Marc: She mentioned that he kind of started from the basics. Went to the day of the accident and then just kind of built up on that to where she was able to drive, she was able to do all her regular activities, just through his process.

David: I really want to emphasize what Marc just said about the three level fusion. A neck fusion is a big deal. You do change the biomechanics**.** She was pretty young right—I think you said in her thirties?

Marc: She was in her late forties.

David: Forties. Okay. So within about five to ten years, the spine starts breaking down, especially with a three level fusion, where you have quite a long stiff segmented part of the spine and the breakdown problems are severe. Essentially she was recommended to have surgery on a normal spine, correct?

Marc: Yes.

David: And look at the difference in the outcome. So, no cost, no risk, she's now pain free, full function of her spine and she's doing fine. And as you well know, this is exactly the reason I quit spine surgery really at the peak of my career, because I would see variations of this situation, you know, three to five times every week. I would feel fortunate if I could get to the patients like you just did before they had any surgery, but often patients have had these huge surgical interventions that they've either had a complication with, or they've broken down, or their pain is just a lot worse. They're still salvageable, but again, they've gone through all sorts of cost, risk, and suffering associated with surgery.

And I think it's also interesting, it's so illogical to walk into a physician's office and have a surgical decision made on the first visit. It just doesn't make any sense at all. I mean, you don't know the physician. They don't know you. They don't know the background. As you and I both know, when you're under stress, which all of us are to some degree, it changes the body's chemistry and alters the perception of pain. Then when you have the additional accident or work related injury, etc., it just increases your stress, which effects every cell in your body, which increases the pain, and somehow medicine has given the impression in our society that everything has a structural cause, where *probably over 90 percent of pain does not have an identifiable structural cause*. It's pretty remarkable.

Marc: I completely agree. We've had this discussion on numerous occasions. Anxiety and pain fibers run down the same fibers in the brain. One common example I tell my patients is, "If I put glue on your feet and I told you to stand in front of a door, and I'm going to open the door very quickly and it's going to hit you. Would you not all of a sudden get pain in the back of your neck just trying to avoid getting hit in the forehead?" They say, "Of course." Then I tell them, "I'm going to take the glue off their feet, tell them to sit on the other side of the room and still open the door, then what happens? Are you still having the neck pain?" Well they say, "No, why would I?" And then I would ask them, "Well have I operated on you in the interim?" They said "No." "Well do you have anything structurally wrong at this time?" They say "No." So then I ask them, "Well then what happened?" They said, "I think it's probably the anxiety."

Marc: I told them, "Our bodies are playing tricks on us with the anxiety, such that our normal fight or flight response from when we were not living in homes and we were out wandering around the forest and wondering what is rustling in the trees. Is that an animal about to jump out and pounce on us, or is it just the wind—and our body's natural response to that is creating fear."

David: I agree, and I'm excited, so I 100 percent agree! We have about five more minutes, and I just wanted to take a deep breath and think about the *next five years.* Let's just talk about your program for instance in terms of just things you'd like to see change. I know you already made a lot of changes to get where you are very quickly. What is part of your vision of how you want to see spine surgery change for a given patient, for patients in general?

Marc: The first and most important thing is what we've been talking about this whole time—which is not making a decision on the first meeting. *What I tell all my patients is, "I want you to go home and think of more questions."* Because what happens with a lot of patients is they are only going to remember about 10-15% of what we're actually telling them. They're going to be so fixated on what's going on and what's going on that scan that they forget about everything else. I want them to bring in family members. I also want them to consider that there are many other *different* ways of getting their pain under control. And what I tease them about every time is, if I get you better with conservative management, I'm still going to take full credit for it, even though you put in all the hard work.

David: Right.

Marc: You know. It's important to develop that relationship with your patient. I think, you know, if you were walking down the street and a gentleman or a lady said, "I'm going to stick a knife in your back." The first thing you're going to do is call the cops.

David: Right.

Marc: However, you're perfectly fine walking into a person's office that has these distinguished pieces of paper up on a wall and saying, "Okay, I met you for four and a half minutes, let's go for it. Why don't you do a nine hour surgery that will supposedly change my life for the better?"

David: Right.

Marc: So I think, if we could just change ourselves as *spine specialists*. I don't even want to use the word surgeon. I want to use spine specialist because *the team does not consist just of the surgeons, but it includes everyone. It includes their physical therapists, includes their podiatrists, it includes their internists, and it includes their families. And most importantly it includes the patient.* If they're willing to engage in their own spine care, they're going to improve no matter what.

David: Right. Can you describe in brief detail about how much difference you can see with a good solid structure care program? I mean, when I was a resident we did physical therapy and injections and that was about it. But the data shows about only 20% of physicians are comfortable treating chronic pain, and less than one percent enjoys it. And as you know, treating chronic pain has been far and away the most enjoyable part of my practice and career, which is shocking. I was like everybody else, I'd get really frustrated, and I didn't know what to do. The problem is that most physicians aren't

trained in the correct paradigm where chronic pain is a neurological problem. I know you've been exposed to it before and after the training. Can you just give a quick overview about the difference that you see if a person does take charge of their own care?

Marc: Absolutely. The patients who actually take charge of their own care are the ones that are willing to accept this multidisciplinary approach. The ones that are not, that want the quick fix, are the ones that are going to seek out. If you're not going to give them the answer they want, they will eventually seek out someone else, and they will eventually get that surgery for the quick fix. And that's not the patient who is really going to get the optimized care and the chance to really get as good as they should be.

David: Right.

Marc: One of the issues I've had recently involves my getting a scan of a patient across my desk which really confused me. I had seen the patient and sent the patient to conservative management, and then I got this scan that asked me to please evaluate for infection and CSF leak. And I was thinking that I didn't remember operating on this patient. I opened up the chart and saw that I sent this individual to physical therapy and water therapy, which is what I tend to do. The patient was not really content with that answer and wanted a quick fix. The patient had very limited symptoms in the back. The patient went somewhere else and ended up with a three level fusion, an infection, and a CSF leak. The CSF leak is when the bag that the nerves are in gets a little bit of a tear and needs to be repaired, but now, post-operatively there is an infection. Now the patient could end up with a much worse issue such as meningitis. And who knows what their future lies ahead of them. You know, for something that, in my opinion, would've been resolved with some conservative therapy.

David: Right.

David: It's a very disturbing trend. I have one gentleman who had a one level fusion at age thirty that he did not need. Long story short, he had 29 surgeries in 20 years, nine major infections, and ended up being fused from his neck all the way to his pelvis. I mean, it was just a nightmare beyond words.

Well Marc, thanks for your time. I appreciate this. When we have the second half of our conversation next time, we will discuss the evolution of your surgical technique, how you deal with the stress of being a physician, and how that affects your performance. I really appreciate your perspective.

Marc: Thank you very much; I really appreciate you having me on the show.

Tom: Thank you Dr. David Hanscom and Dr. Marc Moisi. I want to remind our listeners that we'll have another episode of **Back in Control Radio with Dr. David Hanscom** next week. We hope you'll join us, and in the meantime, remember to visit the website at www.backincontrol.com

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Note: The original transcript of this episode of Back in Control Radio with Dr. David Hanscom has been edited for readability