

Live Case Recordings #1 -Initial Consult

Okay, in preparing for the initial consult, the only thing I really do is I use my Chart Part for Initial Consult that pre-populates it with chief complaint, focused medical history, assessment and plan, and then I type in the patient's name. I might go ahead and add all of these orders, although you have to add a diagnosis, so I typically wait to do that until after I've spoken with the patient. The Chart Part obviously saves an enormous amount of time. It has the follow-up language written here. You can adjust this if you add any tests. One click adds all of these tests to their encounter after you add the diagnosis, which you can do here, or you can do in the test panel. Then, all I have to do during the consult is speak to the patient, establish a rapport, collect their chief complaints and medical history, and then add any additional tests that I want to, or remove tests if necessary, add the diagnosis, save the encounter, and I'm finished.

Chris: Okay, Christine, it's really nice to meet you. Why don't we just start with your chief complaint— what brought you to see me—and then I'll ask you a few questions about your medical history related to that complaint, things you've tried so far, what has been successful, what hasn't been, and we'll go from there.

Christine: Okay. Well, what brought me to you is actually my son, who has been involved in holistic medicine and trying to figure out what is going on in my body with my multiple sclerosis.

Chris: Um-hmm.

Christine: And I was diagnosed in 1999, and I went downhill very quickly. Since then, it's been a long road of trying to heal my body and figure out what's going on.

Chris: Okay. Tell me a little bit more about the progression since 1999.

Christine: Well, I was working out at the gym in July 1999. Went to bed and woke up the next day, and my right side was paralyzed, like a stroke. It hit all of a sudden. And over a period of time, I saw a neurologist. They diagnosed me on Columbus Day of 1999, and I started on many medications. I went through five different types. Over that period of time, I went into a wheelchair within three months.

Chris: Okay.

Christine: Since then, I have tried to, you know, do exercises and eat healthy, but I'm still learning.

Chris: Yeah. And in terms of eating healthy, what's been the diet that you've—have you tried various diets, or have you just not been following any particular approach? Tell me more about that.



Christine: In 2005, I went gluten-free.

Chris: Um-hmm.

Christine: And then, over a period of time, after gluten-free, I did Terry Wahls. I did Paleo and then autoimmune Paleo.

Chris: Okay.

Christine: And that's what my most recent thing is—autoimmune Paleo.

Chris: Uh-huh. And did you see any improvements with any of those approaches?

Christine: Yes, I did.

Chris: Can you tell me what improved and maybe if you use a scale, percentage improvement—like 100 percent being completely gone. What would it be?

Christine: Okay. Well, on the scale of MS, I went from a 6.5 to a 6.

Chris: Okay.

Christine: So, I went completely into a wheelchair after being diagnosed, and through the diet, I now walk without a walker.

Chris: Wow.

Christine: So, that's quite a bit different. So, I would say there's an 80 percent chance—that I still have the disease, 20 percent improvement.

Chris: Okay.

Christine: And through that, now... I've been doing bone broth and different things, and that's what brought me to you, because I know you understand what's going on in my body to help the body heal.

Chris: Okay. And in terms of, you know, investigation of other things that could be contributing to immune dysregulation, have you done any work with any other functional medicine providers or done any testing outside of what we might call a conventional approach to MS?

Christine: No, I have not. This is my first time. I did work with a nutritionist in 2006, and she got me on a regimen of vitamins, biotics, and using those, and I have been tested for levels in my



vitamins, and that's probably the closest to what I've gotten to what you have to offer—working with that and then with my diet.

Chris: Okay.

Christine: And through the drugs, I've been on three types of chemos, two monoclonal antibodies, and different—other different drugs, so they've tried many things. I could barely breathe. It attacks my breathing and my ability to think and see. When I was at my worst, I was in diapers, in bed completely.

Chris: Um-hmm. I'm really sorry to hear that. It sounds like you've been through a lot.

Christine: Well, 17 years, but the good point is it brought me to you, and I have hope, and I know that I have even witnessed in my own time of the last 17 years that when I am on the autoimmune Paleo or on a diet that is specific for me, I have more energy and more strength. And I can now walk without aid, but I can't walk down the street. I do fall.

Chris: Right. Okay. Tell me more about that. So, you can walk for short distances without aid?

Christine: Yes. My leg just goes numb all of a sudden. I'll be walking, think I'm fine, and boom, I go down numb.

Chris: Uh-huh.

Christine: And it just goes dead, and I'm down on the ground. So, I still have to be very careful. At times I use the wall to get around when I notice that, but if I'm outside, of course, I don't have any walls.

Chris: Right.

Christine: I just have the air.

Chris: Right.

Christine: [Laughs] It doesn't do well.

Chris: Tell me more about how your health was before the onset of this in 1999.

Christine: Alright. Let's go back to when I was a child. I had fever blisters and cold sores from when I was a very young child. When I was in seventh grade, which was 1968, I was diagnosed with colitis.

Chris: Okay.



Christine: I had bowel problems throughout my whole life. I've had problems with constipation, and I take 750 mg of magnesium every night just to keep me regular, so I've had that. Besides that, nothing else. I used to be an aerobics instructor. I was a high school math teacher and a coach, and I was very active. I have three sons, and I used to play soccer and all kinds of sports with them. I used to get up every morning and do three-to-five miles before going to work and the workout at the gym, so I was very active before, but I was plagued with cold sores.

Chris: Okay. Throughout your life?

Christine: Yes, since I was about 7 or 8 years old.

Chris: Do you have any family history of autoimmune disease?

Christine: No.

Chris: Okay. And your sons—are they healthy and well?

Christine: I have one middle son who is on the autistic spectrum.

Chris: Um-hmm.

Christine: So, with him, we deal with that. He was born, and he is schizoaffective. He was born with mild CP, and he's been in special programs all the way through his life. He's 35, and he lives with us.

Chris: Um-hmm.

Christine: He's also seeing you.

Chris: Okay.

Christine: Or seeing Dr. Nett.

Chris: Dr. Nett. Right. Okay. Is there anything that stands out to you in terms of the onset of this? Anything that was happening when the onset occurred? Was there a particular stress happening at that time?

Christine: My husband and I were going through a very stressful year in our marriage, so there was a lot of stress from that. I was in a car accident where I was rear-ended two months before the MS actually attacked or hit.

Chris: Okay.

Christine: I was in a car accident about 10 years earlier where it was a five-car pileup.



Chris: Um-hmm.

Christine: Of being rear-ended on the freeway.

Chris: How long ago was that, prior?

Christine: That was 10 years earlier. My MS is only in the spinal cord. I have a lesion about $1-\frac{1}{2}$ inches in my spinal cord.

Chris: Okay.

Christine: Between the fifth and sixth vertebrae. I do not have lesions in my brain. One of the things that they have said is, "Were you ever in a car accident?"

Chris: Right. That's one of the reasons I was asking. Let's see. Anything else you want to tell me?

Christine: And there was also water damage in our house in 1998. We had a big windstorm. The roof was taken off, and there was mold damage in our house for about two months until it got remediated.

Chris: Um-hmm.

Christine: And that happened also at the same time as the car accident.

Chris: Right. Very interesting. Have you listened to my podcast with Dr. Shoemaker? Are you familiar with chronic inflammatory response syndrome and the connection between that and autoimmunity?

Christine: Yes.

Chris: Do you have or have you had mercury dental amalgams?

Christine: I have two.

Chris: Okay.

Christine: I haven't had them taken out. They are still there.

Chris: Alright.

Christine: I mean, I have two.

Chris: Currently. Yeah, currently in your mouth. Okay. And have you had any testing for mercury so far?



Christine: No.

Chris: Okay. Have you done a visual contrast sensitivity test?

Christine: No. No. The only thing that I've done is just working with a nutritionist and through Kaiser, working with my neurologist, and just testing for my vitamin blood levels.

Chris: Okay. Alright. So, thank you for sharing that with me. It's really helpful to get a sense of what has gone on these past 17 years. It helps me to know what tests I want to order so we can get to the bottom of what is dysregulating the immune system. So, in a situation like this with a disease like MS, the goal from the functional medicine perspective is to identify and address any triggers of immune dysregulation, so anything that could be exacerbating this immune dysfunction that you're experiencing. These things can range from mold or biotoxins, which you mentioned you were exposed to prior to the onset; heavy metals, mercury possibly in your case given the amalgams and the fact that you haven't had them removed or haven't done any treatment for that. Then, things such as GI pathology, so SIBO, dysbiosis, disrupted gut microbiome, fungal overgrowth, etc. Nutrient imbalances, either deficiencies of certain nutrients or excesses of other nutrients, and then HPA axis dysregulation, so changes in cortisol production or the diurnal cortisol rhythm—how cortisol is produced throughout the day.

When we identify and address those things, it doesn't mean, in my experience, that we can cure MS or make it disappear entirely, but we often do see significant improvements and improvements in quality of life, and that's primarily what we're shooting for.

Christine: You know, and I did not mention, I also went on a trial, with my doctor, of high-dose biotin, 100 mg three times a day, last October. When she tested me last time, which was three months ago—I see her next Thursday—when she tested me last time, I had improved for the first time in 17 years!

Chris: Okay. That's great. What was the dose again?

Christine: 100 mg three times a day of biotin.

Chris: Okay. Yeah, that's an extremely high dose.

Christine: And there are trials going on with MS and the high-dose biotin, and she put me in one.

Chris: Great. Okay. So, other than the diet, that was the most significant improvement you've had in the last 17 years?

Christine: Yes. To have strength back in my hands and my legs and to be able to flex my ankle with my foot coming up, which I could not do before. I had drop foot, and now there is more strength there.



Chris: And improved sensation and strength in your leg? Okay.

Christine: And then, for the first time, I walked in my yard without assistance! My husband was with me, but we just wanted to see because my goal is to walk a football field, which she is going to test me next Thursday, and I'm hoping that I can do that.

Chris: Um-hmm.

Christine: But, of course, I'll be going down hallways where I can grab a wall.

Chris: Sure. Got to start somewhere.

Christine: [Laughs] Yes. And my goal with you is just to get stronger, whatever happens with MS, but just to get more improved lifestyle because what happens with me is like I'll talk to you today, and tomorrow I might be in bed for days, weeks, or a month. I don't know how long. It just hits overnight. I didn't also mention I've had kidney and bladder infections. I meant to mention that too.

Chris: Throughout your life?

Christine: Yes, pretty much since I was a teenager.

Chris: Okay. Let me get that down too. Okay, so what I'd like to do is order a panel of tests. So, the first one is a complete blood panel. It's a very thorough blood panel that has markers for blood sugar dysregulation, nutrient status, metabolic function, and immune function, and it just helps me get a sense of what your basic overall health is and then what the status of various nutrients are that can contribute to immune function.

Then, we're going to do a comprehensive hormone panel that looks at your HPA axis function, so cortisol, DHEA, and it gives us a sense of your stress tolerance and resilience. Then, also sex hormones such as progesterone, estrogen, and testosterone and their metabolites, so we look at the entire hormone picture there. We'll do a panel of gut tests, which includes a stool test, a breath test for SIBO, and a urine organic acids tests that looks at dysbiosis and other markers that are helpful. We actually do two different stool tests from two different labs, and the reason for that is that they use different methodologies, and they are complementary. It would be great if we could just do one stool test and get all the information we need, but until that stool test gets created, we're left doing two different tests.

Because of your contact with mold in the past, and especially how close it was to the onset of MS, I would like to do two screening tools that will help us determine if we should go forward and do more comprehensive biomarker testing. One is called a visual contrast sensitivity test. This detects your ability to hone in on decreasing patterns of visual contrast. Studies have shown that people with biotoxin illness have a decreased ability to do that. They are not able to detect visual contrast



as well as people who aren't exposed to biotoxins, so it's a fairly sensitive test, and it can be really helpful in determining whether you were affected by your exposure to those biotoxins.

The second test is called a biotoxin illness survey. It's more of a questionnaire, but it's a validated questionnaire that looks at your symptoms in 13 different clusters. If you have symptoms in eight or more of those clusters, then it is suggestive that you have a biotoxin illness. Neither of these tests can rule in or out biotoxin illness conclusively, but they are a really good starting place for determining whether we need to do more.

Christine: Okay.

Chris: So, I'm going to add all these tests to your record here. Then, I also want to start with a Quicksilver—we'll do a Quicksilver blood metals test that looks at levels of not only mercury but other metals.

Christine: Okay.

Chris: Then a Quicksilver Tri-Test, which looks at your mercury in a little bit more detail. There are two main forms of mercury. One is organic mercury that we get from eating seafood, and the other is inorganic mercury that we get from dental amalgams. They have different effects on the body. This is the only test that I'm aware of that differentiates between inorganic and organic mercury. It also looks at your serum levels, your hair levels, and your urine levels, and that tells us how well you are detoxifying mercury because we primarily eliminate inorganic mercury through the urine, and we primarily eliminate organic mercury through the hair. You can look at the ratio of the blood-to the-hair mercury and blood-to-the-urine mercury and get a sense of how well you're eliminating it.

This is a lot of testing, but I've found that in cases where autoimmunity is present, it's really important to get a sense of what all of the triggers are that could be contributing and exacerbating the condition so that we can address those and get the best possible result. Do you have any questions about the tests?

Christine: No, but I just feel like God led me to you, and I'm very positive on what is going to come out of this whole thing, that I know that I'm going to answers. Even though MS may always still be there, I just feel very confident in what's going on and what we're doing here, and I think it's a new starting point. I've seen just with biotin how much I've improved. If we can find the triggers, I can't imagine how much more I'll improve. I feel very blessed to be in your presence even to be able to do this.

Chris: I'm really happy to hear that, and I'm grateful for your feedback. My passion is to help people recover their health so they can live the life they want to live. Absolutely.

Christine: My goal is to walk on the beach one day again.



Chris: That's awesome. I will do-

Christine: I won't say... because it's like—when it's taken away from you, and then all of a sudden you become this other person, you really appreciate what you don't have.

Chris: I completely understand, and I will do everything I can to help you achieve that goal.

Christine: Thank you, and we look forward to meeting with you too when we come up.

Chris: Absolutely. So, we are going to send you a really detailed follow-up after the appointment. You'll hear from my staff, and it's going to contain instructions for how to complete the tests. They are mostly kits that are sent to your home, and you can do most of the tests in your own home. The exception is blood work, which you can either go to a lab for or have a phlebotomist come to your home. There will be FAQs for all the lab tests that answer the questions that you might have. You'll get a follow-up after this appointment which explains everything that we talked about and how to do all of the testing. You can disregard the diet advice because you're already following it. Actually, you're following a level above it with the autoimmune Paleo protocol, and you're already familiar with that. Then, the tests—some of the tests come back pretty quickly. Some take a couple of weeks to come back, and some take a little bit longer, so there is generally about an eight-week wait between the initial consult and the case review, as I'm sure my staff explained. Then, when we meet in person, we'll go through a report of findings where I describe what I found in all of the lab workup, the underlying patterns that I think are contributing to the immune dysregulation. We'll talk about any recommendations for further testing based on what we discovered, and then I will outline the first phase of the treatment plan.

Christine: Awesome. I look forward to that. I'm going to give you a high-five on the screen.

Chris: Alright. High-five to you.

Christine: I look forward to it.

Chris: I do too.

Christine: I appreciate it. God bless, and I'll be praying.

Chris: It's (been) great to meet you virtually, Christine, and I'll see you in a couple of months.

Christine: You too, Chris.

Chris: Alright. Take care.

Christine: Alright. Thank you. God bless. Bye-bye.



Okay, now to close this out. Just review here and see if there are any notes that I want to add. I didn't add anything about the heavy metal testing, so I just put a note in there about the heavy metal testing, review. Check this box. Actually, it looks like I need to add these to the record, save the encounter, and I'm finished. That's it.

The staff will now process this, get all the lab kits to the patient along with instructions and FAQs. Any handouts that they need will be added to the chart, and then I will see her in person in a couple of months or two-to-three months, whenever she can get all the testing done and get the paperwork back to us.

Alright, see you next time.