

Welcome to case number two of lesson four in module six. And this case is a little bit larger, meaning that it has a little bit more data to collect. So I want to start with the symptoms of this woman who is 47 years old and still cycling. She experiences severe back and leg pain. and still cycling. She experiences severe back and leg pain through discussing this with her at session one, which our first session was in January. She and I both agreed that this may be a structural issue, and we'll come back to that.

But through her life, she's experienced heavy cycles and has been diagnosed with endometriosis and fibroid tumors. Now, the iron anemia has been lifelong and as you might suspect, there is heavy fatigue involved. She feels a sense of overwhelm, meaning that not only does she have depression and anxiety and brain fog, but the fact of dealing with all of these symptoms for her entire life has really taken a toll on her. And every day she experiences something. She has, from the gut standpoint, constipation and a lot of gas and bloating that has gone on for the last 10 years.

So we can tell that there is a lot going on. She, you know, from a personal standpoint, she's a very hard-working woman, and she's very determined. She wants to improve her health. She knows that she can. She knows she has that capability. But she doesn't know where to start. And it's to the point now where she had to reach out for someone to assist her in finding the right path to make changes and to help her body heal.

All right, so now I'm going to load in the one foot position, the individual markers. Okay, so as you can see, her red blood cell count is below functional range, just a bit, but it is. Her hemoglobin is 7 and the reference range on that is 13 to 14. We also have a hematocrit of 25.4, which is very low, and that reference range is 37 to 44. Honestly, all of her numbers are very high and low out of range. MCV of 65, MCH of 17.8 and a very low MCHC. This RDW is 19.8.

Honestly, I've never seen one that high in my practice. Neutrophils are low at 41, lymphocytes are high at 48, monocytes are high at 8.9, and the acinophils and basophils were each below 1. Iron was at 14, TIBC high at 360. Her saturation level it should be somewhere between 25 and 35 percent. Ferritin was a 2. Now she also came to me with these markers that were taken in December of 2019 and and her first session with me again was in January. She had also completed a GI map in that same time frame and she showed no H. pylori, but there were several protozoa and there were incidents of dysbiosis that we could tell just through the altered states of her different bacteria. Now, obviously, with the anemia, that wasn't a surprise that she had a diagnosis, but we start to see different things pop out here in the individual markers that we can discuss as a pattern that we are seeing.

Now the RBC count, what you're looking for is something to tell you how many they have. So, when it's low, we know one of three things. There's either a low production, there is destruction of the actual cell, or there's a loss. Well, how do we know the difference? Well, we can look at the RDW and we can help use that to make a determination. So with an RDW, if we're looking at something that is very normal or maybe just a little low, we could consider that that might be through destruction or loss. But when we're looking at an RDW that's very high, we normally will see that pattern in a nutrient deficiency. Well, there's no surprise here because her nutrient deficiency is overwhelming. Now, I will tell you that I had her between our first session and our second session, also do a test for copper. I wanted to understand what her copper picture looked like and you'll see this when we do the side-by-side comparison markers but her copper level was at 60, so it was low as well. We want to see zinc somewhere in the range of 90 to 135. Now, looking at the copper, even though that was very low, we have to understand how much is actually bound. We have to use ceruloplasmin levels to determine how much is bound and how much is free.

So even though she didn't have a large amount of total body copper showing in the blood, her ceruloplasmin level was very low itself. It was 17.2 and that range should be between 19 and 39. So

that's telling us that even though the copper was low, there was still not much of that copper that was available for use by the body. There was not a lot of bound copper, bound with ceruloplasmin. And copper, zinc, ceruloplasmin, they all play into this picture of iron. and we can figure in that there are other nutrient deficiencies as well, even though we're not necessarily seeing them in the blood work. And that's what makes this case so interesting, because we don't have typical patterns to go by.

So let's look at this a little deeper and see if we can't come up with some patterns. So I'm gonna put anemia in here first. And when we're seeing an iron level of 14 and a ferritin level of two, we have to believe that this is some type of iron anemia. Now let's look at the neutrophils and the lymphocytes. This is a slight pattern here, but the neutrophils should fall somewhere around 50 to be in an optimal range. Lymphocytes should fall somewhere around 35 to be in an optimal range. But yet, we see just the opposite here and the neutrophils are lower than the lymphocytes. So, we might think that there was something viral happening. We would consider that as the potential.

Now it was interesting to me that her monocytes are at 8.9 because that's elevated a bit over the reference range. And so this is a long term pattern or if there were any changes within the last year. Even though she has several protozoa and dysbiosis and no HP, no HPYL, we are seeing a very low eosinophil and basophil count. Now this picture here, quite disturbing. How much lower can you go on ferritin? So this is the picture of iron anemia and that seems pretty clear. What I cannot tell at this point from the blood work, and let me be very specific about that, we're just looking at the blood work, I cannot tell if she has low stomach acid.

I cannot tell if she is dehydrated. There is nothing here to tell me this. Her hemoglobin and hematocrit are both very low. There is no dehydration picture here to be seen. So what do I have to do? Well, I have to stop relying on the test and I have to rely on the questions that I'm asking the client. So what do I know about the client? Well, I know a few things that can add to understanding what may be happening within her body that we are not seeing reflected on this blood test. Number one, she is a vegan and she has been a vegan since birth. Okay, so that lifestyle has not changed and she has maintained that her entire life. You might think, oh well Oh well that's her problem. But we have to look beyond that.

We cannot let limiting beliefs interfere with how we're going to help the client. She's not going to change her eating style. So we have to understand why when there are many very healthy vegans out there that she is experiencing this loss of health and vitality. Now she eats very clean and always has. And to better express that, she does not eat much. Now I think part of her not eating much has a lot to do with her mood and her sense of hopelessness. But she did tell me that she has been losing weight. She's just not hungry and I'm not sure exactly why but I feel part of that is related to her mood. She also explains to me that she eats very little salt. So we talked about that quite a bit. So the only salt that she's using is a very minimal amount on her food.

So this gives us much more insight into the possibility of dehydration. Now looking at her electrolytes on the blood work that I'm gonna share with you towards the end, we're still not seeing any real skew in the electrolyte levels. Sodium, potassium, chloride, carbon dioxide. They're a little bit off, but again, not enough to define this pattern that we're seeking. So I have to believe, because of the clean way that she's eating, and because she uses minimal salt, that dehydration is playing a part here.

Now the other pattern, which may be similar, but again, we're not seeing this, is the low stomach acid pattern. So I'm using the symptoms that she has here and what I'm seeing on the test of the GI map. Granted, she doesn't have H. pylori, but let's go back to what we said about the symptoms. She's dealt with these symptoms for a long time. She is overwhelmed. Her emotions are very low. She's suffering constant depression and anxiety. This is stress. Physiologically, I wouldn't believe

anything but the fact that she has low stomach acid.

Doesn't matter that there's no H. pylori there. So now we say, okay, well, if we're looking at number one, the way that she's eating clean and low salt in her diet, that there is dehydration. Number two, the fact she has really become overwhelmed with her symptoms and her emotional aspect is drawn down and she is finally reaching out for help and she is suffering with these symptoms every single day. As well as showing that low elastase 1 on her GI map. standpoint, that there is low stomach acid. As I pointed out earlier, we don't know a whole lot about the other nutrients. I don't have liver markers on her. I don't have a GGT.

I don't have an LBH. I don't even have an alkaline phosphatase. But I can use what I have, and I can use the symptoms that I have and the questions that I've asked of her to form some patterns and to form a picture. Now, understanding the impression on the whole body biochemistry. One of the first things that I'm thinking is that we need to hit the basics first. You know, it's no different than what we've talked about on many occasions. So, moving to sole water, and from there to electrolytes, vitamin C powder, and HCL, with digestive enzymes, of course.

So why did I make these choices? Well look at this pattern. These markers are so incredibly low. The one thing that I also want to share with you is when we are looking at this iron panel, she has been getting iron IVs for many years. So what happens is she'll go in, she'll get an iron IV, they'll do a blood test in a week and the iron and ferritin will be raised up a little bit and then it goes way down again to this. These numbers that I'm showing you here have been pretty consistent for most of the blood tests that she has. So she's taking in the Iron IV, it's not making any difference. We can see it if we test for it, but it just goes away.

Now that goes back to that pattern of looking at the copper. Because if there is no improvement when you're taking an iron supplement, whether it's a capsule or an IV, then we might suspect that copper is low. It's not in the gut to do any binding. And sure enough, looking at the copper level that she had, it's very low and ceruloplasmin is low. So that might explain something. I know that with her diet, being a vegan, she has the opportunity to get most of her nutrients in. Granted, she might need to supply a little B12, but that's not always the case. A person's body is going to be what it's going to be, and I'm not going to make the assumption that she needs to add in anything at this point. But we have a situation where the iron is low, the copper is low, I'm assuming the zinc is low based on the serum zinc that we got, but I'd prefer to see the alkaline phosphatase too.

So, I want to approach this with these steps that are going to gently, gently support her entire body and we know she needs some support with the electrolytes. So we turn to the sole water, just one teaspoon a day and an electrolyte powder and she's using one scoop a day per the container. We're not going crazy with it. As a matter of fact, she started with just a half a teaspoon of Solei water and a half a scoop of electrolytes for a week and then built up from there. Now my concern with the iron being so low is why I brought the vitamin C powder in because there is a distinct correlation there between low iron in some cases and low vitamin C. The vitamin C powder that I use and recommend is Perc C-Guard and it is a very very clean food-based vitamin C. It's an ascorbic acid. And then the very last thing was the HCL and I used BioGest. So using the HCL wanted to make sure that the food that she's taking in is being completely digested and sending a good signal as best as we can get to the pancreas and to the gallbladder.

So from this point, we moved on to session two and in session two, that's where I discovered, you know, her new copper, zinc and ceruloplasmin levels. And we discussed the fact that she was really starting to feel better. Her mood had greatly improved. I could hear the difference in her voice and she was shocked over her improvement. At least she just didn't expect it. So it wasn't huge but it was enough to give her hope and she started seeing a difference in other areas that I didn't necessarily put here in the symptom list, but that she had had poor sleep and a dry mouth, another

sign to me that she was dehydrated.

She was drinking water during the day, and I didn't say that earlier, but I really want to highlight that now, because she was taking in plenty of water. We can see it wasn't making any difference for her. So at the end of session two, she took a trip out of the country. She was going to be gone for a month. And before she left to come back to the states, she had some more blood work done. And unfortunately, it was even less than what we had before. But I want to show you the difference and I want you to understand the timeline. We had the first session at the end of January. We had the next session at the end of February.

She left the country and got blood work done on April 20th. So in this time she without fail consumed sole water every day and took HCL with her meals. Her last iron infusion was in December. That was the last time that she got one and as part of her goal she didn't want to have to get more in the future. Now I'm going to switch over to the functional blood chemistry range form so that you can see some of these ranges side by side. Okay, so here is the functional blood chemistry ranges and her test dates were December 2nd, 2019.

And then her next testing after starting to work with me, and that's working with two sessions, we were getting ready to meet for our third on April 3rd, 2020. Again, I don't have a lot of the same markers that she came to me with in December, but we can see here that she had a very low bun, and just looking at her electrolytes, I mentioned earlier that they were a little skewed. Carbon dioxide came up to 25, so it came up into range. Calcium came up into range. And again, no liver markers, no alkaline phosphatase. I did not get a repeat on the lipid panel, but as you can see her cholesterol is a little bit low and maybe HDL just a little higher than it needs to be, but that's not what we were addressing and there was nothing really there of significance at this point in what we're doing.

Now we start looking at this in a really different way. Her RBC that we mentioned earlier had been 3.73, very low, came up into range at 4.19. Now I want you to see this. Look at her hemoglobin. It went from seven to 12. It's not quite in range, but that is a huge leap. Her hematocrit went from 25.4 to 36. Look at this H, I mean this MCV, 65 to 85. MCH in range, MCHC in range.

Look at this RDW. It went from 19.8 where we could see extreme nutrient deficiencies that we didn't have data on, but in an RDW we could potentially suspect not just iron, but B6 and copper and B12 and folate. And look at this, high end of the range, but look how much it came down. Now another interesting pattern that we discovered here is if you remember we discussed the neutrophils and the lymphocytes and the monocytes. Look at the switch. Neutrophils came up into range beautifully. Lymphocytes came into range beautifully. The monocytes went down, but look what popped up. The eosinophils and the basophils. I have a couple different thoughts. Again, we're not that far along.

We're only on session three, but I'm just wondering if her body is just showing us that these things exist and maybe it just wasn't able to before. Another thing is sometimes when the body begins to heal because it has some of the substrates to heal, so her cells are functioning better, she's taking in more nutrients and the body could be trying to fight off bugs. So it's trying to clean itself up. We're not using anything for the gut at this point, but by trying to clean itself up, it may have exposed these underlying dysfunctions. Either way, we will be addressing them in the future. This blew my mind. Serum iron went from a 14 to a 59. There has been no iron supplementation whatsoever.

None. Ferritin went from a 2 to a 16. Iron saturation went from a 5 to a 17. And TIBC, which we would expect to see high with this type of iron panel, came down into range. Things are shifting, things are functioning well, we're seeing some improvement. Now, I wanna share one other really cool fact with you. This blood test was taken on 4-3, and let's see, 17 days before, she started her cycle, she started her period.

And she described to me that it was one of the heaviest periods she had ever had. It lasted for 10 days. So on the 10th day, when her period ended, one of the hardest periods she had ever remembered and the most bleeding. Seven days later, she went and took this test. Can you imagine if she had waited another week or two before taking this test, how more improved these numbers are still reflecting the fact that she had a lot of bleeding going on. That just makes these numbers to me look even better. Her body was able to do this and I just find this a very beautiful thing. We did not do a retest on her ceruloplasmin, copper or zinc, but these are the numbers that she started with in January. Okay, so we're going to hop back over here to the case tracker and look at the step back method and what we've worked on and where we go now.

So the Soleil water, the electrolytes, the vitamin C powder, and the HCL that broad body support. It hasn't targeted anything, it's just what she needs to be in that healing environment. Now at some point vitamin C powder might be able to be dropped off or she might want to continue it. We'll know just based on what her needs are. The next thing that really concerns her are the fibroid tumors and the heavy bleeding and the endometriosis. So our next step together is for her to complete a Dutch test and that should be over the next 45 days that she'll fit that in. And then we'll have a better understanding of what might be happening with the estrogen levels and the picture there. What will those patterns tell us? What will they point to as potentially something dysfunctional?

I can tell you that the GI map did not show a huge amount of beta-glucuronidase. It was at most midpoint. So I'm not looking towards that now. And the truth is, even though she has what I consider to be estrogen dominance, it doesn't mean that her estrogen is very high. It could just mean that her progesterone is very low. So until we get that back we won't really have a full understanding of what's there. And so we're not going to play the guessing game. Because honestly I just don't know. I just don't know what the picture will look like. I know that estrogen does play such a part in the female issues that she has going on. As well as prostaglandins, as well as inflammation. The other thing that we're tracking is, now that we see her numbers so improved, what will the next cycle look like? So that one is coming up pretty soon. I believe it's going to be five days from now.

And so we'll continue this case. We're going to follow this case along and go ahead and add to it as new information comes in. So I'll be going over the Dutch test when we get that in and doing a screen share recording of that so you can see what I'm seeing in the patterns. We'll talk all about that and how it points to this underlying dysfunction and the imbalances that we are pretty sure we can level out. So constipation, gas and bloating, they have calmed down for her. While she was out of the country, she did purchase some powder that would help support that. She is having better bowel movements, more than one a day now, and that's helping her as well. But she still, if she doesn't take the powder, then she's not having a bowel movement or it's more constipated. So, she is still relying on this to ease the constipation. But, let's go back to the stress response physiology. It's very possible that she is not making enough bile. And so, one of the things that she is going sunflower lecithin.

And she's going to do that so that she can increase her phosphatidylcholine which will thin out any bile and help bile production. So we'll see how that goes and I can't wait to bring you the next installment of how she's