AMA Episode 3 with Dr. Emeran Mayer

Q&A PDF

Welcome to the third episode of my Ask Me Anything series where I answer questions asked by premium subscribers. I want to emphasize that my answers are not to be considered a substitute for medical recommendations. It's simply a source of information, questions that you may have had a hard time to get answer for or that you want to hear my personal opinion on.

Here's one question from Babak, and I'm reading this in greater detail because I think it illustrates a fairly common scenario that I've seen in my practice. So Babak says I'm suffering from severe chronic constipation to the point that I can hardly digest food, walk, or even bend over all kinds of tests, several blood tests, colonoscopy, CT scan, stool tests, and have been seen by many doctors, but none of them have been able to diagnose a cure. My illness tried all kinds of laxatives to no avail.

I've also tried eating healthy. Since I'm constantly constipated, nothing goes through, I've lost my job because of this and can hardly get out of my house. As a result of all of this, I've developed a severe depression and anxiety, which as you know, makes things worse in a vicious cycle. So the patient read my book and thought that I would be the person to be able to give him advice, and I want to say right away, this is a story that I have heard many times from patients. Not everybody with constipation has the same severity of their symptoms and the recommendations and the hope that this can be resolved is not as good, quite honestly, as if you had abnormal type of history of mild to moderate constipation.

So constipation can arise for many different reasons. One is that things move through the gut normally, but are held up in the end of the large intestine, also called outlet obstruction. It can also be due to a slow transit throughout the gut, which is present in some patients. And importantly, it can also develop from no change in the motility of the transit and something that we call sensory constipation, the feeling that the gut is always full, but you cannot get rid of the sensation. So without seeing any test results from studies that you've undergone, I wouldn't be able to answer which of these mechanisms could play a role. In your case, the link between severe constipation like this and mental symptoms, particularly depression and anxiety is common. Could almost say that it's two sides of the same coin that this kind of severe constipation usually is the flip side of depression.

The brain has connections. This close connections is, I've described in my book, close connections with the gut to go in both directions. But in terms of constipation and important influence is probably the signals that the brain sends through the sympathetic nervous system or the autonomic nervous system to the gut, which will inhibit contractions, inhibit transit, and inhibit secretions. Solely dietary interventions in your situation may not be sufficient. I think you will have to find a combination of medication or natural products together with dietary recommendation like a high fiber diet to resolve this problem. Another important thing is because of this close link between mental phenomena, particular depression and anxiety, and these food related fears, that if you're afraid to eat something that you may be more constipated. I

think a cognitive behavioral approach to address this issue might also be of benefit. So I would say if you, you're my patient, I would want to make sure what type of constipation you have to have a slow transit constipation or colonic inertia or an outlet obstruction.

I would also want to see if you do certain interventions like for example, the intake of a natural ingredient like rhubarb root, which is very effective in many patients, not in everybody. If that has an impact, I would strongly recommend that you also consult a behavioral psychologist to deal with the issues of conditioned fear of these symptoms and ultimately not as the most immediate thing, ultimately move to a healthy, prudent diet. It's high in fiber, which obviously always facilitates transit through the gut. So hopefully this information is helpful to you and I would strongly recommend to consult with an expert in intestinal motility or constipation because often this information is not easily accessible to family general practitioners or even to many gastroenterologists. Message from Barbara, she says, my daughter was diagnosed with pancreatic insufficiency. She's had diarrhea since January started Creon an enzyme replacement a month ago and no changes prior to that.

Has tried various diets, enzymes, and prescription for microscopic colitis and other disorder that can result in diarrhea with no success. She want to know if there's any dietary recommendations I can give, particularly which fruits and vegetables they might want to add to the diet. So first of all, I think it's crucial that this diagnosis of pancreatic insufficiency is confirmed by gastroenterologists who with expertise in that area, it's a serious disease if it's really present because it affects the absorption of fat, carbohydrates, and proteins can lead in the worst case to malnutrition and several metabolic deficiencies that if untreated will evolve. So first, the most important step is confirm this diagnosis and rule out any other differential diagnosis, including so-called functional diseases like irritable bowel syndrome or inflammatory bowel disease.

So in terms of dietary recommendations, again, when you have the diagnosis confirmed, I would advise you to work with a nutritionist to specialized in a diet, particularly for pancreatic insufficiency, to make up for some of the losses that occur because of the male absorption. I do not believe that a recommendation towards a plant, mainly plant-based diet, would make a big difference in pancreatic insufficiency. I mean, it's always healthy, but it certainly will not get at the root cause of this problem. The important one is fat absorption, loss of undigested and unabsorbed fat in the stool. So hopefully this is helpful.

What I provide here is information medical cannot substitute for medical advice. The next question submitted by Mary Silva. She says, I've recently saw you speak at the Wellness Way seminar at this recent meeting. My mom had come up to you after you've spoken, she asked you if you thought Crohn's disease was curable. Your mom must have misunderstood you because my answer was not that inflammatory bowel disease, including Crohn's disease is curable. I think we always talk about once that diagnosis is made and you have this diagnosis, we talk about the remissions. These remissions can go on for weeks, months and even years, and in the rare case, the problem will never come back. The latter is rare In a typical setting, this colitis or the inflammation got inflammation started in response to, for example, a traumatic injury or a

gastroenteritis and was not really the typical chronic, did not take the typical chronic course of an inflammatory bowel disorder.

Mary Silva goes on. She has been on several medications including so she was started on steroids. Remicade Penza is now on Entyvio. She has been taking steroids for 11 months and she states that this says she wants to take a different approach. So my expertise in this field of inflammatory bowel disease is really the role of the brain gut microbiome system as one factor in driving remissions and driving relapses or so-called flares of disease. I do want to emphasize that if this diagnosis has been made, has been histologically confirmed, that I strongly recommend that you walk with a gastroenterologist specialized in the diagnosis and treatment of inflammatory bowel disorders.

The dietary recommendations have changed. If you are in remission, a Mediterranean type diet has been found to be beneficial, decreasing the risk of flares. It's a different situation. If you are in the middle of a flare, you may go to a residue, a diet low in residues and low in fiber. But once remission is accomplished, go back to the preventive, largely plant-based diet. So this is something I think you should work with both your gastroenterologist and a specialized dietician to come up with the best dietary approach depending on the stage that your disease is on. I'm surprised that you have not responded to any of these medications that you have tried, including the so-called biologics which are affecting a large number of patients. What I would consider, we didn't have enough time to talk about this when we briefly met, if you don't respond to these therapies that the majority of patients with IBD two respond to, there may be other factors that are driving the inflammation and that could be from the brain gut microbiome system. So we do know that chronic stress, for example, comorbid anxiety and depression are modulators of this axis and can have an impact on the inflammatory process. So this is something you may want to look at as well in addition to being on the right diet. So in summary, I think you need to make sure to be on the right medication depending on the stage extent of your disease.

Also, depending on the phase that you're in, you should either be on the residue low diet, low in fiber, but if you are in remission, you should definitely stick to a largely plant-based diet like the Mediterranean style diet. So hopefully this was helpful and will guide you in seeking future treatments from a medical professional. So the next question is from Pargo. He states that I'm facing gut issues. I have flatulence over three years. I've had flatulence over three years. Whenever I eat anything it says all foods. Then after sometimes I pass gas. He's had an upper and lower GI endoscopy, but nothing but these were normal.

And what's concerning is he also states that he has lost significant amount of weights more than 10 kilos, and that he has suffered from stress and anxiety for the last 12 years. Now, particularly whenever he thinks about eating the first thing that comes to mind, that this food will exacerbate his flatulence problem. Then finally, evaluation last year, a local doctor's, they found blast assist hos parasite DNA in the stool test. So he was wondering how he best could manage his anxiety if this is IBS, the symptoms, if the symptoms that he has qualified for diagnosis of IBS and what the best management is. So first of all, increased flatulence, what we call postprandial flatulence. Whenever we eat something, you have increased expulsion of gas. Some people just have the

bloating with or without visible abdominal tension. A lot of people get rid of this unpleasant sensation of bloating by passing gas, and this can become a habit.

Many studies have found that there's not an excessive gas production in the intestine, but that people that have an increased sensitivity to the normal amount of gas that's being produced by the bacteria during metabolism of food, particularly certain vegetables, that this normal amount of gas is perceived as unpleasant or symptoms of bloating leading to this reflex distension of the belly because the gut may be hypersensitive. So hypersensitivity is a common underlying problem that derives this circle. Increased visceral sensitivity is a hallmark of irritable bowel syndrome. I don't know if you qualify for all the criteria like chronic recurring abdominal pain associated alteration in bowel habits, which would be required to make the diagnosis of IBS. But the same mechanism, this increased visceral sensitivity and the conditioned response that you try to get rid of this unpleasant sensation by passing gas and the vicious circle that develops by anticipating whenever you eat something that this is going to happen, the anxiety that this creates, this anxiety gets down to the intestine as well.

And so you may have just developed this visceral feedback loop between anxiety, possible alterations of composition of the gut microbes and the presence of visceral hypersensitivity that work together to produce your symptoms. So I think a good approach would be to start with dealing with anxiety. There's various strategies depending on the severity from mindfulness based stress reduction. Various techniques like GI focused hypnosis or cognitive behavioral therapy are also have been trying to be effective in decreasing, particularly in uk. I think with this conditioned fear response that you may develop your symptoms whenever you eat something, you have to learn ways to break that vicious cycle.

In terms of dietary the dietary component, yes, it's probably advisable to identify if you do eat enough fruits and vegetables, which of those food components trigger more of these symptoms of gas? As I said, bacteria do produce gas as a normal metabolic function, but if you identify, for example, broccoli or cauliflower or the legumes as being particularly a trigger food, then I would start reducing the amount of that food item. And if that gives you some objective improvement of your symptoms, you can play with this and decrease it even further or just on a reduced amount of particular plant-based foods or vegetables that play a particular important role in your symptoms. So hopefully this is information for you. So the next question is from Jess. So she says, I just received my copy of the Mind Gut Connection book and immediately dove into it, but then she says, I was so deflated reading within the first three pages that red wine was considered a healthy polyphenol.

Really clearly, there are polyphenols in particular resveratrol in red wine. It comes from the grapes, particularly the dark grapes that contain a high amount of this particular polyphenol, this particular flavanol. And what I should emphasize is wine is not the best way to provide a sufficient amount of this polyphenol and other polyphenols in your diet. There are many publications and opinion pieces and in book chapters that people emphasize that drinking red wine part of the Mediterranean diet, it provides part of the health benefits of the Mediterranean diet just like olive oil does. I think what's important is you should consider this not for drinking

red wine, a glass or half a glass a day, not as a medicinal approach, but when you go to Mediterranean countries and see how people use wine as part of their Mediterranean lifestyle, it's really in the context of socializing with friends and families and not, they certainly don't think about the health benefits of that.

If you want the health benefits of polyphenols particularly, especially aerial, it's also contained in grapes, in blueberries, cranberries, cacao, and dark chocolate. All of these food sources provide polyphenols and healthy polyphenols for you. So hopefully this will clarify your question. I'm not recommending to drinking red wine on a regular basis other than promoting and enhancing social interactions, and if you do that to drink the wine in small amounts.

So we have another question from Gabs. The person asked this question, If I remember correctly, Clostridiaceae, Turicibacteraceae and L. rhamnosus produce serotonin. Am I right?

As you probably know, the main site for the production, the synthesis of serotonin from the essential amino acid tryptophan is really in the gut in the so-called enterochromaffin cells in the gut that contain the rate limiting enzyme for serotonin production. And some 95% of your body's serotonin is located in these cells and is released in response to specific stimuli, including stimuli signals from several microbes, particularly the ones that produce short-chain fatty acids or secondary bile acids that interact with receptors on these cells to both stimulate the production but also stimulate the release of serotonin into the gut where this hormone then interacts with receptors and it's being taken up by transport mechanisms, the serotonin transporter, but the amount that the microbes themselves produce is minimal. Another site in the body that produces serotonin from tryptophan are specialized nerve cells in the brainstem. So-called ene nuclei that are very small, but they have a big importance because they have projections to most parts of the brain, the cortex and other brain areas.

They play a major role, even though it's a very small amount of serotonin. They play a major role in the modulation of vital functions such as appetite, sleep, pain, sensitivity, and mood. So to answer your question, yes, small amounts of serotonin is produced by certain microbes. A large amount is taking up from the gut lumen after it's secreted by these enterochromaffin cells, which is our body. The majority is produced and released from these enterochromaffin cells, some of which reach the brain via the vagus nerve, and a small amount of serotonin is produced in these cells within the brainstem, these nuclei that play a big role in modulating vital functions. So hopefully that is a satisfactory answer for you.

The last question comes from Linus. He says, hello, what are your thoughts on Kane broad trunk? This is a German word for bread drink. Is it a good fermented drink option? So I wasn't aware of that particular drink. I had to go to the website of the company. If anybody wants to learn more about this. It's an interesting family based company in Germany that has produced this drink by fermenting bread red, which contains mainly lactobacillus like many fermented food products. And so I can't really comment on the health benefits. I'm surely certainly there's no controlled studies on it, but my recommendation is always when people ask me what's important, what food components are most important, I always include naturally fermented foods, which typically include sauerkraut, kimchi, kombucha, many Asian food products,

fermented fish products, and certainly this particular drink would belong into this category. So in addition to these naturally fermented foods, we recommend a diet rich in plant-based fiber and polyphenols. So in general, I would say it's probably a good thing to drink it.

There's a lot of negative press about bread in general in the US in terms of the carbohydrates, in terms of the gluten and the bread. I do want to emphasize that the bread produced in Europe, particularly in Germany, is qualitative, very different. It doesn't seem to have many of these negative side effects that we observe in the US in terms of favoring obesity and indigestion, like bloating. I don’t know if this has to do with the amount of gluten in this food as many other factors. Also the way it's produced, not with all the chemicals that go into industrial agriculture in the us. So in summary, I think it's an interesting drink. I will certainly try it next time I go to Germany, but I can't tell you specifics about its unique benefit over some of the other fermented foods. It's always good to eat a variety of these kind of naturally fermented foods. So if you like it, you may want to add it to your diet.

So hopefully this session was relevant for you, answered some of your questions. Again, I strongly encourage you to submit questions to us, which I will answer to the best of my knowledge. So thanks very much for your attention.