



Transcript Details

This is a transcript of an educational program. Details about the program and additional media formats for the program are accessible by visiting: https://reachmd.com/programs/gi-insights/tbd/15467/

ReachMD

www.reachmd.com info@reachmd.com (866) 423-7849

tbd

Dr. Buch:

Welcome to *Gl Insights* on ReachMD. I'm your host, Dr. Peter Buch. Today we're joined by Dr. Claire Jansson-Knodell, the co-author of "Diagnosis and Management of Celiac Disease," which was published in *The American Journal of Gastroenterology* in March 2023. Dr. Jansson-Knodell is a gastroenterologist at the Cleveland Clinic's Digestive Disease Institute.

Dr. Jansson-Knodell, welcome to the program.

Dr. Jansson-Knodell:

Thank you so much for having me, Dr. Buch. I'm happy to be here.

Dr. Buch:

So let's dive right in. Why is it still necessary to do both serological testing and duodenal biopsies? And the second part of this is under what circumstances may we avoid biopsies?

Dr. Jansson-Knodell:

This is a really important question. So currently, both serology, or the blood test, and duodenal biopsies are needed for the diagnosis of celiac disease in all adults. The European guidelines do allow for a no-biopsy diagnosis in children as long as they meet certain criteria. The criteria are that—one, the family agrees, two, the tTG, or tissue transglutaminase, has to be greater than 10 times the upper limit of normal, and three, the child has a second blood sample taken that's positive for the endomysial antibody. So in current adult practice, we are still doing serology and biopsies to diagnose celiac disease, but potentially, someday, we wonder if this strategy may be reasonable and accurate in adults, but we can't say that at this time.

Dr. Buch:

When we're doing a serology, if duodenal biopsies are not undertaken, what are your concerns of things that we might be missing? And how often does it occur?

Dr. Jansson-Knodell:

So there could be a concern that if we don't do a biopsy and just rely on the serology alone that we might miss something at the time of celiac disease diagnosis that's more important or significant like an intestinal lymphoma. This does not happen very often. In fact, it's quite rare. But it is at least important to get a baseline for these patients in terms of what we're thinking at this time in the diagnosis of celiac disease, so we can also have a measure or a benchmark for when they follow up.

Dr. Buch:

So when are follow-up duodenal biopsies useful?





Dr. Jansson-Knodell:

It's common practice to get a follow-up duodenal biopsy in patients with celiac disease to show that they have healed their intestine on the gluten-free diet. The timing of this is not an exact science at all, but I would say in my clinical practice I do this after about two years on the gluten-free diet. I do it when a patient is feeling pretty good and don't have issues with the gluten-free diet; their serology has normalized in order to show that their small intestine has healed appropriately. We do have some studies that show that the median time to heal the small intestine on a follow-up biopsy is actually closer to about 3.6 years, but I still think two years is a reasonable mark to at least check for improvement if not complete normalization.

Dr. Buch:

Thank you for that. A lot of clinicians ask about this one. How should we be assessing patients with an IgA deficiency?

Dr. Jansson-Knodell:

So when a person has a low IgA level, the tTG-IgA, or the tissue transglutaminase immunoglobulin A antibody, is no longer a useful screening test for celiac disease. Instead, we have to look to our IgG-based tests. The test of choice for a patient with IgA deficiency to look for celiac disease is the tTG-IgG.

Dr. Jansson-Knodell:

At times we do also use the deamidated gliadin peptide, or the DGP-IgG, but overall, the tTG-IgG performs better.

Dr. Buch:

Thank you for that. So should asymptomatic family members be screened for celiac disease?

Dr. Jansson-Knodell:

Absolutely. Any person who has a first-degree relative with celiac disease should be tested for celiac disease, so this includes children, parents, siblings. We have less data about more distant relatives or extended family members, but we also know that if multiple family members are affected by celiac disease it's more likely that we will see it in a family.

Dr. Buch:

And when we're testing asymptomatic family members, they may not become symptomatic for years. How do you address that?

Dr. Jansson-Knodell:

That's a good question. So sometimes these patients can wonder why a gluten-free diet is important for them, especially, if they don't have symptoms at all, and what we often talk to them about in clinic are the complications and consequences of celiac disease. So even though they're not necessarily feeling anything, gluten is still damaging their small intestine, and for that reason it can have an impact on their nutritional adequacy, their ability to absorb vitamins, minerals, micronutrients, and have an impact on their bones. It can also increase the risk of certain cancers, including small intestine adenocarcinoma and of course, the dreaded enteropathy-associated T-cell lymphoma, small chance of an increased risk of death according to some of the larger population-based studies over in Sweden but quite minimal. So these are the things that we would talk to patients who are asymptomatic about and that they would benefit from the gluten-free diet to lower these risks and prevent these complications.

Dr. Buch:

For those just tuning in, you're listening to *GI Insights* on ReachMD. I'm Dr. Peter Buch, and I'm speaking with Dr. Claire Jansson-Knodell about celiac disease.

So, Dr. Jansson-Knodell, how does celiac disease affect the liver?





Dr. Jansson-Knodell:

Celiac disease is a multisystem disease and has numerous gastrointestinal and extraintestinal manifestations. The liver is just one of these extraintestinal manifestations. The most common way that we see celiac disease affect the liver is an elevation in transaminases, the AST and the ALT. These typically are around two to three times the upper limit of normal in patients with celiac disease and respond appropriately to normalizing within the regular range that we would expect for men and women on a gluten-free diet.

Dr. Buch:

So again, when working up mildly elevated liver function tests in addition to all the things that we do, tTG-lgA I think would be an appropriate screening test for these patients.

Dr. Buch:

So to zero in on the patient's diet, how long might it take to have intestinal healing once a patient has started a gluten-free diet?

Dr. Jansson-Knodell:

So thinking about the gluten-free diet, you can break it down into improvement in symptoms, improvement in serology, and improvement in intestinal biopsy or intestinal health. Improvement in symptoms takes days to weeks. Oftentimes, patients are feeling better quite quickly. Bloating, abdominal pain, diarrhea all improve rather rapidly if on a gluten-free diet. Then when we think about serology, this can take weeks to months for it to normalize and come back down to where it should be. Intestinal healing is a much longer process, and this takes months to years. So as I mentioned earlier, the median time to heal the small intestine is about 3.8 years on the gluten-free diet. We tend to check to see if someone has healed on a repeat biopsy usually around two years, but this is a shared decision with the patient. Dietary compliance is definitely a key factor in the mucosal recovery, and for this reason our dietitians are such an important member of the celiac disease care team.

Dr. Buch:

One further question that I just want to ask you—and some clinicians do this and some clinicians do not—tTG-IgA for compliance and making sure that the patients indeed are following their diet, how do you feel about that?

Dr. Jansson-Knodell:

So I definitely support the use of following the tTG-IgA serially in a patient with celiac disease. I check it about once a year in my stable patients, but after a person is first diagnosed with celiac disease, I want to see that downward trend, so I'm checking it about once every three months. It's not a perfect marker for compliance because it certainly has its flaws, and there are patients who can normalize their tTG but still have not healed their small intestine, so it's not a perfect correlation. Oftentimes though, we do see that when patients have not normalized their tTG or not even showing a downward trend, they are still being exposed to some gluten in their diet, and so checking this helps us in terms of getting them reconnected with a dietitian to see if they can tease out where that gluten might be sneaking in and help them remove it so their intestine does have a chance to heal. So I would say that checking the tTG-IgA is important, not necessarily for dietary compliance reasons, although it does give us a hint of that, but also just to see their overall trend for their celiac disease.

Dr. Buch:

Now that we've reached the end of our discussion, are there any additional thoughts you'd like to share with our audience today?

Dr. Jansson-Knodell:

I just want to be sure to highlight the importance of a dietitian with expertise in the gluten-free diet for patients with celiac disease. A gluten-free diet is a very hard thing to do. When someone is diagnosed with celiac disease, it's not something that they can take a medication for, see the doctor once every three months. It's something they have to think about every time they eat, which is something





we all do multiple times a day. It is a lifestyle change, and the first year is often the hardest, so patients need that partnership with a dietitian who has expertise and who knows just how to direct them and teach them to read labels and look for hidden sources as they learn to adjust to life with celiac disease.

Dr. Buch:

This has been an excellent review of celiac disease, and I want to thank my guest, Dr. Claire Jansson-Knodell, for sharing her insights.

Dr. Jansson-Knodell, thanks very much for joining me today.

Dr. Jansson-Knodell:

Oh, thank you for having me, Dr. Buch. I appreciate your time, and I was happy to be here.

Dr. Buch:

For ReachMD, I'm Dr. Peter Buch. To access this and other episodes in this series, visit ReachMD.com/GIInsights where you can Be Part of the Knowledge. Thanks for listening, and see you next time.