Confirm Celiac Diagnosis Before Changing Diet

BY MICHELE G. SULLIVAN

EXPERT ANALYSIS FROM THE ANNUAL MEETING OF THE AMERICAN COLLEGE OF PHYSICIANS

SAN DIEGO – An intestinal biopsy is almost always necessary to confirm celiac disease and is a must before committing a patient to the only effective treatment – a lifelong gluten-free diet.

Rheumatologists are starting to recognize that celiac disease occurs at higher rates in patients with such autoimmune diseases as myositis than in the general population (RHEUMATOLOGY NEWS, June 2011, p. 48).

Sticking to such a restricted diet is difficult and expensive, Dr. Sheila Crowe said at the meeting. "A lifelong gluten-free diet sounds simple, unless you're the patient. … Eating out is very difficult, especially for children and teens who face a lot of peer pressure. And eating gluten free at home is expensive. Studies in the United States, Canada, and the United Kingdom confirm that a lifelong diet of gluten-free foods costs about three times more than a normal diet," said Dr. Crowe, professor in the division of gastroenterology and hepatology at the University of Virginia, Charlottesville.

Because treating celiac disease requires this lifelong commitment, a positive serologic test is not enough to rule it in, she said. Nor are any of the available immunologic tests, including the most widely used, tissue transglutaminase IgA (tTG IgA), specific enough to replace intestinal biopsy as the sole method for reliably diagnosing celiac disease. "A positive tTG test is not enough to place a person on this lifelong treatment without confirmation from an intestinal biopsy," she said. "This is especially important for children, because of the higher likelihood of false positives in that group."

tTG IgA has a very high sensitivity and specificity, but it is not perfect, Dr. Crowe said. "If you have a patient with clinical symptoms and the tTG comes back negative, there is still a 10% chance that's a false negative. Another scenario could be a patient who has an autoimmune disease or a relative with celiac, and is experiencing celiac symptoms. If the tTG came back negative on that person, I would still do an endoscopy."

The only possible exception might be a patient with celiac symptoms who already has biopsy-proven dermatitis herpetiformis, with the classic immunofluorescent deposits at the dermal-epidermal junction. "If you biopsy these patients, the intestine will show the changes associated with celiac disease every time," Dr. Crowe said.

Celiac disease is no longer considered a disorder of childhood. "The disease is there lifelong. It appears you cannot suppress the immune response," she said.

The intestine rapidly responds to a gluten-free diet, "But the tendency to have an immunologic response to gluten is always there," Dr. Crowe said.

Relapses are common. Patients are most likely to "fall off" the diet when symptoms begin to abate, she said. They may simply feel "cured" and resume old eating patterns, or they may drop the diet because of changes that can occur as the intestine heals. If patients "had diarrhea and malabsorption of nutrients, they might find themselves getting constipated and gaining weight on the gluten-free diet, fall off, and get ill again. Even if the intestine is healed, the vast majority of data tell us that patients will relapse," at some point after abandoning the dietary restriction, Dr. Crowe said.

This can lead to the development of refractory celiac disease, in which the intestine fails to recover despite a gluten-free diet. These patients may be unable to fully absorb nutrients and need supplemental feeding methods.

The goal of celiac management is to promote intestinal healing, optimize nutrition, and avoid long-term damage, Dr. Crowe said. "It's key to bring in a knowledgeable dietitian to help. And I mean knowledgeable – not someone who is going to hand your patient a diet sheet and that's all."

Many celiac patients are already nutritionally compromised at the time of diagnosis. "This is the time to measure their nutritional parameters," Dr. Crowe said. "They may need supplements. Many are deficient in vitamin D, iron, folate, zinc, or other trace elements."

The risks of untreated disease "are not inconsequential." Patients can develop problems related to nutrient malabsorption, including osteopenia, infertility, miscarriage, and intrauterine growth restriction, and are four times more likely than is the general population to develop a malignancy.

Dr. Crowe gets royalties from a book on celiac disease. ■

Consider Plasma Exchange For Certain AAV Patients

BY SHARON WORCESTER

FROM A SYMPOSIUM SPONSORED BY THE AMERICAN COLLEGE OF RHEUMATOLOGY

CHICAGO – Plasma exchange remains a reasonable treatment option for certain patients with refractory antineutrophil cytoplasmic antibody–associated vasculitis, according to Dr. Phillip Seo.

For example, in patients with antineutrophil cytoplasmic antibody (ANCA)–associated glomerulonephritis who present with renal failure, this "more traditional therapy that we don't think about much anymore" can delay progression to dialysis and can buy time for patients awaiting renal transplant, Dr. Seo said at the symposium.

Dr. Seo, codirector of the vasculitis center at Johns Hopkins University, Baltimore, presented a case involving a 64-year-old woman diagnosed with pauci-immune glomerulonephritis consistent with ANCA-associated vasculitis (AAV). She was treated with standard high-dose prednisone and cyclophosphamide, but she returned to the emergency department 2 weeks later with dyspnea and was found to have pulmonary hemorrhage.

In patients like this, it is reasonable to consider plasma exchange, he said.

In a randomized trial comparing plasma exchange and methylprednisolone as additional therapy for ANCA-associated glomerulonephritis (the Randomized Trial of Plasma Exchange Versus Methylprednisolone as Additional Therapy for ANCA-Associated Glomerulonephritis or MEPEX), patients randomized to receive seven courses of plasma exchange had significantly better renal survival at 3 months than did those who received methylprednisolone (81% vs. 61% of surviving patients in the groups, respectively, were dialysis independent at 3 months), Dr. Seo said, noting that this effect persisted for the duration of the 12-month observation period.

The problem – and the main reason that plasma exchange has fallen by the wayside as a treatment option for these patients – is that long-term survival did not differ between the groups, he said.

While it is "very reasonable to consider plasma exchange as a standard treatment regimen" because it can potentially allow for a year off hemodialysis, or a year during which a patient can be prepared for renal transplant, patients don't survive any longer, thus it is also reasonable to not offer plasma exchange, he said. "For those of you who don't have access to plasma exchange on a routine basis at your hospital, I think you should still sleep well at night."

That's not to say the treatment won't regain favor for broader use, he added.

A study now underway – the Plasma Exchange and Glucocorticoids for Treatment of ANCA-Associated Vasculitis (PEXIVAS) trial – is evaluating whether plasma exchange is beneficial in patients with AAV with milder forms of glomerulonephritis, as well as in those with pulmonary capillaritis and hemorrhage.

Dr. Seo disclosed that he is a consultant for Genentech. ■

Posttransplant Survival Improved for PAH Patients

BY MARK S. LESNEY

FROM THE ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR THORACIC SURGERY

PHILADELPHIA – Mortality on the waiting list is still a problem, but long-term survival after lung transplantation of patients with pulmonary arterial hypertension has improved significantly over time, a study has shown.

Pulmonary arterial hypertension (PAH) was classified as idiopathic (iPAH) or associated with congenital heart diseases or connective tissue diseases in the study, which was divided into 1997-2004 and 2005-2010 cohorts.

Of 2,918 patients referred to the program from January 1997 to September 2010, 316 (11%) presented with PAH (World Health Organization Group 1). In these patients, PAH was classified as iPAH (123 patients), congenital (77 patients), connective (102 patients), and other (14). The number of referrals was similar between 1997-2004 and 2005-2010. Follow-up was completed until September 2010 for all patients.

Among the 100 PAH patients listed for lung transplantation (LT), 57 had bilateral LT and 22 had heart LT. Eighteen patients on the waiting list died; three are still waiting. Waiting list mortality was higher for patients with connective tissue diseases, Dr. Marc de Perrot said at the meeting. No patient with iPAH has died on the waiting list since 2005; 25% died before that time, he and his associates at Toronto General Hospital found.

After LT, 30-day mortality decreased from 24% in the first cohort to 6% in the second, a significant difference. Ten-year survival was 56% after bilateral LT and 49% after heart LT, a nonsignificant difference. However, 10-year survival was significantly worse for iPAH patients at 42% vs. 70% for the remaining patients ($P = .01$). Ten-year survival was best for connective tissue disease (69%) and congenital (70%) patients.

"Patients with connective tissue diseases have a high mortality on the waiting list, but enjoy excellent long-term survival after transplant," Dr. de Perrot concluded. ■

VITALS

Major Finding: In the period 1997-2005, 25% of patients with idiopathic pulmonary arterial hypertension died on the waiting list. None died on the list between 2005 and 2010. After lung transplantation, the 30-day mortality decreased from 24% in the earlier period to 6% in the later period.

Data Source: A review of 2,918 patients at a single institution who were referred for lung transplantation.

Disclosures: Dr. de Perrot reported receiving speaker and teaching honoraria from Actelion.