CD is an autoimmune-mediated inflammation caused by sensitivity to gluten, a family of proteins found in wheat and certain other grains that can damage the small intestine and cause malabsorption.

Diagnosis

Celiac disease is a chronic autoimmune disorder that can be triggered by gluten consumption. It is characterized by an immune response to gluten ingestion, which leads to villous atrophy and ultimately, small bowel malabsorption.

About 95% of people with CD have HLA-DQ2, another leukocyte antigen (HLA) marker; only 4% do not have this second marker, HLA-DQ8. These markers are highly positive predictive values for appropriate individuals with a family history of celiac disease and other autoimmune disorders, and in children, patients in the view of diagnosis and both HLA-DQ2 and HLA-DQ8.

Upper endoscopy with duodenal biopsy has been demonstrated to be one of the early diagnosis of CD. Patients with villous atrophy demonstrate lymphocytic infiltration, crypt hyperplasia and villous atrophy that improves with a gluten-free diet.

Treatment

Patients with CD require treatment because over time, untreated CD can results in significant morbidity and mortality. The most common manifestation of untreated CD is malnutrition, which can lead to anemia, osteoporosis, and deficiencies in vitamins, minerals, and other nutrients. Patients with CD have a higher risk of developing iron-deficiency anemia, which can be treated with oral iron supplements.

The American Gastroenterological Association recommends that patients with CD adhere to a gluten-free diet for life. The diet should be free of all forms of gluten, including wheat, rye, and barley. Patients should also avoid foods that contain gluten, such as bread, pasta, and bakery products.

Barrett’s esophagus and esophageal adenocarcinoma

Barrett’s esophagus is a condition in which the lining of the esophagus changes from normal squamous epithelial tissue to columnar epithelial tissue, which is the type of tissue found in the stomach.

According to Gregory G. Ginsberg, MD, Penn Gastroenterology has the largest published series of endoscopic treatments for high grade dysplasia and intramucosal adenocarcinomas in the greater Atlantic region. A past president of the American Society of Gastrointestinal Endoscopy (ASGE), Dr. Ginsberg is director of endoscopy services at Penn Gastroenterology and professor of radiology.

In addition to dedicated specialists and researchers, docs Gary Falk, MD, MS, the management approach at Penn involves the state of art technology and access to NIB-funded clinical trials of developing new treatments and drugs to prevent and treat Barrett’s esophagus and adenocarcinomas.
Barrett’s Esophagus and Esophageal Adenocarcinoma: Diagnosis, Treatment and Ongoing Research

“Early detection and prevention are the cornerstones of the Barrett’s esophagus and esophageal cancer management program at Penn Medicine,” Dr. Ginsberg says. “Survival increases dramatically if the disease is caught early, at or before the stage of detection to better discern metaplastic and dysplastic tissue. It is important to note that advanced endoscopic technologies are only available in a select band of the high-income region like those that we offer here. Many patients are referred to us from other facilities and we expect that many more referrals will come from those who are interested in our services.”

Incidence remains static, but obesity is generally regarded to be a major risk factor. Despite an alarming rise in incidence, esophageal adenocarcinoma remains a relatively rare tumor in the United States (~12,000 cases/year according to SEER) affecting about three million adults older than age 40, but obesity is generally regarded to be a major risk factor. Despite an alarming rise in incidence, esophageal adenocarcinoma remains a relatively rare tumor in the United States (~12,000 cases/year according to SEER) affecting about three million adults older than age 40.

The treatment of low-grade dysplasia is complicated by its occurrence in Barrett’s esophagus and esophageal adenocarcinoma. Early detection and prevention are the cornerstones of the Barrett’s esophagus and esophageal cancer management program at Penn Medicine. The goal of multimodal endoluminal therapy is complete eradication of Barrett’s mucosa. The therapy is safe and effective in selected patients and compares favorably with operative and observational therapies.

Treatment Strategies

At Penn, the treatment of Barrett’s esophagus and esophageal adenocarcinoma is dependent upon the stage and nature of the disease and the patient’s physical status and comorbidities. Despite an alarming rise in incidence, esophageal adenocarcinoma is dependent upon the stage and nature of the disease and the patient’s physical status and comorbidities. Dr. Ginsberg says, adding that Penn’s breadth of resources, including advanced endoscopic therapies, minimally invasive, abdominal and thoracic surgery, and advanced pathology and esophageal surgery programs have made it a regional leader for the evaluation and management of dysplasia and early esophageal cancer. Confocal laser endomicroscopy and endocytoscopy are also being used as an additional tool to assure the capacity of these technologies to improve dysplasia detection and discrimination.

For patients with no dysplasia, treatment involves proton pump inhibitors (PPIs) for reflux control and nitrates with high-definition white light endoscopy in conjunction with narrow band imaging and a rigorous biopsy protocol.

The treatment of low-grade dysplasia is complicated by its occurrence in Barrett’s esophagus and esophageal adenocarcinoma. Early detection and prevention are the cornerstones of the Barrett’s esophagus and esophageal cancer management program at Penn Medicine. The goal of multimodal endoluminal therapy is complete eradication of Barrett’s mucosa. The therapy is safe and effective in selected patients and compares favorably with operative and observational therapies.

Early detection and prevention are the cornerstones of the Barrett’s esophagus and esophageal cancer management program at Penn Medicine.

The diagnosis of low-grade Barrett’s esophagus demands the sort of expert pathology review available only at centers like Penn Medicine.”

Gary W. Falk, MD, MS