CT Children's CLASP Guideline

Celiac Disease

INTRODUCTION

Celiac disease is an immune mediated enteropathy characterized by injury to the small bowel triggered by the ingestion of gluten (a protein found in wheat, barley, and rye) in genetically susceptible individuals. Symptoms of celiac disease may develop any time after gluten containing foods are introduced into the diet, usually after 6-9 months of age. Prevalence in the general public is 1:100. The approximate prevalence in first degree relatives is 1:20 and second degree relatives is 1:40.

The vast majority of patients have **no symptoms**.

Symptoms associated with celiac disease include:

- **Intestinal symptoms**: diarrhea, abdominal pain, weight loss, bloating, failure to thrive, anorexia, vomiting, constipation
- **Extra-intestinal symptoms**: anemia, short stature, arthritis, delayed puberty, aphthous stomatitis, tooth enamel defects (pitting, grooving), skin rash (dermatitis herpetiformis), neurologic symptoms (loss of gross motor skills, seizures, depression, headache), osteoporosis, fractures, infertility, amenorrhea, alopecia

Celiac disease may also be found in the setting of other **associated conditions** including:
Type 1 diabetes, thyroid disease, IgA deficiency, Sjogren's syndrome, Williams syndrome, Down syndrome, Turner syndrome.

INITIAL EVALUATION AND MANAGEMENT

INITIAL EVALUATION:

- Targeted history and physical exam
- **Laboratory Studies:**
  - **If suspecting Celiac**: IgA quantitative, tissue transglutaminase IgA (most sensitive and specific)
    - Gliadin IgG/IgA antibodies are ***not*** recommended in most patients because of poor sensitivity/specificity
  - **IgA deficiency**: Consider IgG based tests (EMA-IgG & TTG-IgG)
  - **In patients <2 years** : TTG-IgA combined with a DGP-IgG to improve the accuracy of the testing may be helpful as there is an appreciable false negative TTG-IgA in this age group.
  - **Consider additional labs**: Comprehensive metabolic panel, PT/PTT
  - Consider sending screening labs every 2-3 years for asymptomatic children with associated conditions mentioned above or with 1st degree relatives with celiac disease starting by 2 years of age
    - For patients in care of a subspecialist, coordinate screening tests to avoid laboratory study duplication
  - *If laboratory workup is borderline or equivocal, consider repeating laboratory testing in 6 months*

INITIAL MANAGEMENT:

- **PLEASE DO NOT START A GLUTEN FREE DIET PRIOR TO REFERRAL!** (This can interfere with definitive diagnosis on endoscopy)

WHEN TO REFER

ROUTINE REFERRAL (within 1 month):

- ✓ Positive screening testing in the setting of metabolically stable patient.

URGENT REFERRAL (within 1 week):

- ✓ Severe weight loss and growth issues
- ✓ Abnormal coagulation studies
- ✓ Vomiting
- ✓ Neurologic signs
- ✓ Frequent diarrhea

HOW TO REFER	**Referral to Gastroenterology (GI) via CT Children's One Call Access Center** **Phone:** 833.733.7669 **Fax:** 833.226.2329 For more information on how to place referrals to Connecticut Children's, click **here**. ***Information to be included with the referral:*** ▪ Notes from the initial and follow up visits with the PCP ▪ Complete growth chart ▪ Relevant laboratory studies
WHAT TO EXPECT	**What to expect from CT Children's Visit:** ▪ History, physical exam ▪ Evaluation of laboratory testing ▪ Endoscopy if indicated to confirm the diagnosis ▪ Extensive nutritional counseling if diagnosis confirmed ▪ Referral of family members and siblings for screening if problems identified