

Chronic Pancreatitis: American College of Gastroenterology Clinical Guideline on Chronic Pancreatitis (2020)

About the Guideline

- This guideline was created by an expert committee from the American College of Gastroenterology (ACG) to provide an evidence-based, practical approach to the diagnosis and management of chronic pancreatitis (CP).
- Recommendations are guided by an updated mechanistic approach to define, diagnose, and manage CP, emphasizing early recognition, symptom management, and identification of the etiology driving pathologic changes in the pancreas.
 - The goal of these recommendations is to minimize the progression and adverse effects of CP by earlier intervention at the etiologic level.
 - This is a change from the traditional clinicopathologic approach that focuses on pathologic changes and disease progression.

Key Clinical Considerations

Become familiar with the recommendations and best-practice statements provided in this guideline, especially if you work in an acute care setting.

Diagnosis

- For individuals for whom there is high clinical suspicion for CP based on careful history and physical exam, the following approach is suggested:
 - Cross-sectional imaging to evaluate for characteristic morphologic changes in the pancreas.
 - Either computed tomography (CT) or magnetic resonance imaging (MRI) is recommended for first-line diagnostic imaging.
 - Endoscopic ultrasound (EUS)
 - Recommended if diagnosis remains uncertain following either CT or MRI.
 - EUS is invasive and has a low specificity.
 - Secretin-enhanced magnetic resonance cholangiopancreatography (s-MRCP)
 - Recommended if cross-sectional imaging or EUS does not confirm diagnosis and clinical suspicion remains high.
 - Histologic evaluation of pancreatic tissue
 - Recommended only in high-risk patients with high clinical and functional suspicion for CP for whom imaging studies are inconclusive for diagnosis.
 - May be obtained via EUS.
 - Considered the gold standard.
 - May be used to rule out CP.
 - Pancreatic function testing should be used as a complement to diagnosing CP; it can, however, diagnose exocrine pancreatic insufficiency (EPI).

Etiology

- Prioritize establishing the etiology of CP to best understand the mechanism, target therapies, and prognosis as well as implement risk-factor modification as appropriate.
- Genetic testing is recommended for patients with a high suspicion of CP or pancreatic-associated disorder of unclear etiology.
 - Important for younger patients and those with an unclear etiology of symptoms.
 - Should include PRSS1, SPINK1, CFTR, and CTSC gene mutation analysis.
 - Allows for targeted therapy initiation and prognosis.
- For all patients with clinical suspicion for CP, comprehensive risk-factor evaluation should take place to elucidate underlying mechanisms, to identify the presence of fixed and modifiable risk factors, to identify potential targets to optimize treatment, and to provide prognostic information.
 - Tools endorsed by this guideline include the TIGAR-O Version 2.0 Pancreatitis System Risk/Etiology Checklist and the M-ANNHEIM scoring system for the grading of CP severity.

Natural History and Clinical Symptoms of Chronic Pancreatitis

- Alcohol and smoking cessation are recommended for all patients with CP.
- Progression to CP can be predicted by the identification of disorders of underlying pancreatic inflammation, such as acute pancreatitis and recurrent acute pancreatitis.
- The risk for development of diabetes mellitus (DM) due to pancreatic enzyme failure is thought to be related to the duration of CP disease.
 - Other risks for DM development include a high body mass index (BMI) and tobacco use.
- There is no evidence to support the routine screening of CP patients for malignancy.

Management of Pain in Chronic Pancreatitis

- Surgical intervention is recommended over endoscopic therapy for long-term pain management and for ductal decompression in those patients with obstructive CP.
- The use of pancreatic enzyme supplements is not recommended as a means of treating pain related to CP.
- Antioxidant therapy for CP is supported as a means of pain reduction. Thiamine and vitamin C can be considered.
- Celiac plexus block can be considered for pain treatment.
- For patients actively using alcohol, cautious consideration should be practiced before using nonemergent interventional procedures (endoscopic or surgical therapy) for pain management.
- Opiates may be considered for individuals with CP when other pain management strategies have been exhausted.
- If other symptom-control measures have failed, a total pancreatectomy with islet autotransplant (TPIAT) may be considered for selected patients with refractory chronic pain.
- Experimental treatments should be limited—with the exception of clinical trials.

Management of Exocrine Pancreatic Insufficiency in Chronic Pancreatitis

- To improve associated nutritional complications, pancreatic enzyme replacement therapy (PERT) is recommended for individuals with CP and EPI.
- Periodic evaluation for malnutrition and related complications, such as osteoporosis and fat-soluble vitamin deficiency, is recommended.

Reference

Gardner, T. B., Adler, D. G., Forsmark, C. E., Sauer, B. G., Taylor, J. R., & Whitcomb, D. C. (2020). ACG Clinical Guideline: Chronic Pancreatitis. *The American journal of gastroenterology*, 115(3), 322–339.
<https://doi.org/10.14309/ajg.0000000000000535>