

Chronic Pancreatitis: Diagnosis, Classification, and New Genetic Developments

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The utilization of recent advances in molecular and genomic technologies and progress in pancreatic imaging techniques provided remarkable insight into genetic, environmental, immunologic, and pathobiological factors leading to chronic pancreatitis. Translation of these advances into clinical practice demands a reassessment of current approaches to diagnosis, classification, and staging. We conclude that an adequate pancreatic biopsy must be the gold standard against which all diagnostic approaches are judged. Although computed tomography remains the initial test of choice for the diagnosis of chronic pancreatitis, the roles of endoscopic retrograde pancreatography, endoscopic ultrasonography, and magnetic resonance imaging are considered. Once chronic pancreatitis is diagnosed,

proper classification becomes important. Major predisposing risk factors to chronic pancreatitis may be categorized as either (1) toxic-metabolic, (2) idiopathic, (3) genetic, (4) autoimmune, (5) recurrent and severe acute pancreatitis, or (6) obstructive (TIGAR-O system). After classification, staging of pancreatic function, injury, and fibrosis becomes the next major concern. Further research is needed to determine the clinical and natural history of chronic pancreatitis developing in the context of various risk factors. New methods are needed for early diagnosis of chronic pancreatitis, and new therapies are needed to determine whether inter-ventions will delay or prevent the progression of the irreversible damage characterizing end-stage chronic pancreatitis.

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