

The New Revised Classification of Acute Pancreatitis 2012

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KEYWORDS

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- Necrotizing pancreatitis

KEY POINTS

- The aim of this study is to update the original 1991 Atlanta Classification of acute pancreatitis to standardize the reporting of and terminology of the disease and its complications.
- Important features of this classification have incorporated the new insights into the disease learned over the last 20 years, including the recognition that acute pancreatitis and its complications involve a dynamic process involving two phases, early and late.
- The accurate and consistent description of the two types of acute pancreatitis (interstitial edematous pancreatitis and necrotizing pancreatitis), its severity, and, possibly most importantly, the description of local complications based on characteristics of fluid and necrosis involving the peripancreatic collections, will help to improve the stratification and reporting of new methods of care of acute pancreatitis across different practices, geographic areas, and countries.
- By using a common terminology, the advancement of the science of acute pancreatitis should be facilitated.

INTRODUCTION

More than 20 years have passed since the first concerted effort to classify acute pancreatitis by the Atlanta Classification, spearheaded by Edward Bradley in 1991.¹ At the time, this classification was an attempt to define a common terminology and

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define the severity of the disease such that physicians around the world would accept and adopt a uniform classification. Although novel at the time, the classification defined and used several terms that never "caught on," and the actual classification as written by the Atlanta Conference, while referred to by many articles, has not been accepted or used universally.² Moreover, in these last 20 years our understanding of the etiopathogenesis of acute pancreatitis, its natural history, the various markers of severity, and, equally important, the features of the disease on state-of-the-art cross-sectional imaging, have led to a plethora of often confusing and imprecisely used terms. Indeed, a common terminology for the disease, its severity, and, possibly most importantly, the pancreatic and peripancreatic "fluid" collections, have yet to be acknowledged and adopted. Because of this confusion, a group of researchers decided to revise the Atlanta Classification using a new technique for a global, Web-based "virtual" consensus conference over the Internet. Although the concept was novel, the idea of a Web-based global consensus, as described in this article, was only partially successful. Nevertheless, using this approach initially, with very helpful and insightful input from numerous pancreatologists of many different disciplines (gastroenterology, surgery, pathology, diagnostic and interventional radiology, gastrointestinal endoscopy, and acute care medicine/surgery) around the world, a new classification was developed and vetted through many different international societies dealing with acute pancreatitis. Using this input, the Working Group (the authors of this article) then collated the evidence-based literature whenever available to construct a new classification, in part based on the two phases of the natural history of the disease (the first week or two, and the next several weeks/months that follow). The product of the past 5 years of work culminated in the Classification of Acute Pancreatitis 2012.³ This classification addresses diagnosis, types of acute pancreatitis, severity, and definition of pancreatic and peripancreatic collections, which are discussed herein. The authors hope that this classification will unify the terminology to allow global consensus and facilitate comparison of studies published in the literature.

DIAGNOSIS OF ACUTE PANCREATITIS

The diagnosis of this disease is usually straightforward and, as described in many studies, involves a combination of symptoms, physical examination, and focused laboratory values. This classification requires 2 of the following 3 features: (1) central upper abdominal pain usually of acute onset often radiating through to the back; (2) serum amylase or lipase activity greater than 3 times the upper limit of normal; and (3) characteristic features on cross-sectional abdominal imaging consistent with the diagnosis of acute pancreatitis (see later discussion). Note that not every patient requires pancreatic imaging; for instance, for the patient with characteristic abdominal pain and increased serum amylase/lipase activity, a contrast-enhanced computed tomography (CECT) or magnetic resonance imaging (MRI) is usually not required on admission or later (if it is mild acute pancreatitis), provided the clinical picture is that of acute pancreatitis.

DEFINITION OF THE TWO TYPES OF ACUTE PANCREATITIS

There are two basically different forms of acute pancreatitis: interstitial edematous pancreatitis and necrotizing pancreatitis.

Interstitial Edematous Pancreatitis

The majority (80%–90%) of patients presenting with the clinical picture of acute pancreatitis will have this more mild form. The differentiating characteristic of acute