# **Acute Pancreatitis Induced Fluid Collections - The Naming Game**

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### To the Editor,

Despite the publication of the "Revision of the Atlanta Classification and Definitions by International Consensus" [1], we have noted a continued variability in terminology used for reporting the types of pancreatic fluid collections complicating acute pancreatitis. In response to this perceived variability, we devised a survey to determine if the updated terminologies were being implemented in everyday practice. Our hypothesis was that physicians are still unclear on how to distinguish and name pancreatic fluid collections.

We surveyed a range of medical specialists including internists, general surgeons, radiologists, and gastroenterologists using questions regarding pancreatic fluid collections with the correct answer reflecting terminology used in the Revised Atlanta classification, based on both clinical history and radiographic imaging. The survey was performed at multiple tertiary care teaching hospitals in March of 2014. The survey is noted in Figure 1 with correct answers italicized.

The surveys were handed out at the monthly meetings of the above physicians. Respondents included 23 internists, 17 general surgeons, 19 radiologists, and 10 gastroenterologists. Fifty-seven were residents/fellows and 12 were attending physicians. Twenty-six (37%) were females. Training background was broken down into 19 (27%) allopathic, 32 (46%) osteopathic, and 18 (26%) international allopathic physicians. Seven (37%) of the radiologists answered all questions correctly. No internist or gastroenterologist answered all questions correctly, and only 1 general surgeon answered all questions correctly. The most missed question was #7, with only 20 (29%) of respondents answering correctly. The questions answered correctly most often were #6 and #10, with 59 (81%) of respondents answering each correctly.

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These results led us to draw the conclusion that physicians are lacking in knowledge of a unified nomenclature for fluid collections associated with acute pancreatitis. Education in this area could result in more consistent management of patients with pancreatic fluid collections including appropriate use and course of antibiotics and efficient consultation of appropriate specialists for collections requiring drainage.

#### 1. What is your area of expertise?

- a. Gastroenterology
- b. Radiology
- c. Internal Medicine
- d. General Surgery

## 2. What is your level of training?

#### a. Resident

- i. R1
- ii. R2
- iii.R3
- iv. R4
- v. R5

#### b. Fellow

- i. R4
- ii. R5
- iii.R6
- iv.R7

#### c. Attending

- i. <5 years
- ii. 5-10 years
- iii. 10-20 years
- iv.>20 years

#### 3. What type of graduate?

- a. US
- b. Foreign

# 4. Gender

- a. Male
- b. Female

- 5. A patient is admitted with epigastric abdominal pain, nausea, and vomiting with elevated lipase. CT abdomen reveals a moderate sized free homogenous appearing fluid collection at the tail of the pancreas. Patient has a history of acute recurrent pancreatitis and CT abdomen from 3 weeks ago revealed inflammation of pancreas without fluid collection. What is the diagnosis of the fluid collection?
  - a. Pancreatic abscess
  - b. Infected pancreatic pseudocyst
  - c. Acute peripancreatic fluid collection
  - d. Acute necrotic collection
- 6. A patient with chronic abdominal pain undergoes CT imaging of the abdomen which reveals a homogenous peripancreatic fluid collection with enhancing wall which is stable in size from last CT 3 months ago. Fluid is aspirated and found to be infected. What is the definition of the fluid collection?
  - a. Pancreatic abscess
  - b. Infected pancreatic pseudocyst
  - c. Acute peripancreatic fluid collection
  - d. Acute necrotic collection
- 7. A 58-year-old man developed acute pancreatitis 5 days ago. Which of the following terms would best describe Figure 6a [2], in addition to acute necrotizing pancreatitis?
  - a. Interstitial edematous pancreatitis
  - b. Walled off necrosis
  - c. Acute peripancreatic fluid collection
  - d. Acute necrotic collection
- 8. The same man had a repeat CT performed 5 weeks later. Which of the following terms would best describe Figure 6b [2]?
  - a. Interstitial edematous pancreatitis
  - b. Walled off necrosis
  - c. Acute peripancreatic fluid collection
  - d. Acute necrotic collection

- 9. A 25-year-old woman with history of alcohol abuse presented with epigastric pain for 72 hours. Which of the following terms would best describe Figure 8 [2]?
  - a. Pancreatic pseudocyst
  - b. Necrotizing pancreatitis
  - c. Acute peripancreatic fluid collection
  - d. Acute necrotic collection
- 10. Areas of "walled off necrosis" are infected by definition.

True or False

- 11. A 61-year-old man who was hospitalized 2 months ago with CT showing interstitial edematous pancreatitis with acute peripancreatic fluid collections, returns with epigastric abdominal pain. Which of the following terms would best Figure 12a [2]?
  - a. Pancreatic pseudocyst
- b. Necrotizing pancreatitis
- c. Acute peripancreatic fluid collection
- d. Acute necrotic collection
- 12. How is acute necrotizing pancreatitis distinguished from walled off necrosis?
  - a. Duration of collection
  - b. Size of collection
  - c. Morphology on CT
  - d. Clinical symptoms

Figure 1. Survey: Pancreatitis and associated Complications

#### **Conflict of Interest**

Authors declare to have no conflict of interest.

#### References

- 1. Banks PA, Bollen TL, Dervenis C, Gooszen HG, Johnson CD, Sarr MG, et al. Classification of acute pancreatitis 2012: revision of the Atlanta classification and definitions by international consensus. Gut 2013; 62:102-111. [PMID: 23100216]
- 2. Thoeni R. The Revised Atlanta Classification of Acute Pancreatitis: It is Importance for the Radiologist and Its Effect on Treatment. Radiology 2012; 262:3. [PMID: 22357880]