

in the directional eFLOW (Prosound α 10, Aloca Co., Tokyo, Japan) color mode using contrast-enhanced color-Doppler endoscopic ultrasonography (CC-EUS) despite perfusion of the contrast media.

Aims and Methods: The aim of this study was to compare the vascular structure of AIP with that of pancreatic cancer using CC-EUS. We evaluated the perfusion image and the vascular image of the mass in AIP patients (11) with an increase in serum IgG4 levels (477.3 ± 314.2 IU/mL) and in pancreatic cancer patients (11) with elevated serum CA19-9 levels (49839.0 ± 80061.6 mg/dl), on CC-EUS. Perfusion images were obtained at 20-30 s after injection of a contrast agent, Sonazoid (GE Healthcare AG, Oslo, Norway), by extended pure harmonic detection mode and were assessed as to homogeneity or heterogeneity (containing partial low echoic areas or multiple spotty low echoic areas) enhancement. The vascular image was assessed in the directional eFLOW color mode despite perfusion of the contrast media (40-50 s after injection of Sonazoid) as to the presence of a dendritic vessel network or only a few feeder vessels. The parameters for imaging were as follows: Mechanical index, 0.22-0.24; transmission frequency, 5.0 MHz; and receiving frequency, 5.0 MHz. The Chi-square test or Fisher's exact test was used for comparison of categorical data of the two groups when appropriate. This study was approved by the institutional review board of Sendai City Medical Center. All subjects gave informed consent.

Results: A homogenous pattern in perfusion imaging was seen in 73% of patients with AIP (8/11) and 55% of those with pancreatic cancer (6/11). The rates were not significantly different between the two groups ($P = 0.33$). In the other patients with a heterogenous pattern, multiple spotty low echoic areas were seen in 33% (1/3) and 80% (4/5) in each group, respectively. A dendritic vascular pattern in the eFLOW color mode was seen in 82% (9/11) of patients with AIP, but was not seen in any of patients with pancreatic cancer. The other patients with AIP (18%) and all patients with pancreatic cancer showed only a few feeder vessels in the mass on CC-EUS.

Conclusion: The eFLOW color mode using Sonazoid may be useful for evaluating the vascular structure of AIP for differential diagnosis from pancreatic cancer.

Status of the presenting author: Chief resident.

The authors declare: No significant relationship.

Vascular image in autoimmune pancreatitis by contrast-enhanced color-Doppler endoscopic ultrasonography: Comparison with pancreatic cancer

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Introduction: In autoimmune pancreatitis (AIP), veins of various sizes are highly affected by obliterative phlebitis without damage to arteries, in contrast, the involvement of both arteries and veins is observed in the mass of pancreatic cancer. A vascular image without blooming artifact in the pancreas is clearly observed