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Contact: Lin Tian wjg@wjgnet.com 86-105-908-0039 World Journal of Gastroenterology

## How to diagnose superior mesenteric artery aneurysm correctly for radiologists?

A recent case report published on May 14, 2010 in *World Journal of Gastroenterology* describes the imaging features of a ruptured superior mesenteric artery aneurysm, which created a giant hematoma and mimicked a pancreatic mass, with mild dilatation of main pancreatic duct.

Previous studies have shown how pancreatic disease can be simulated by various anatomical structures in the retroperitoneal region at the pancreatic level. Aneurysm of the hepatic artery, for example, simulates pancreatic disease, even with the possibility of choledocus compression. In the case, mild compression of the main pancreatic duct by the aneurysm sac could also explain the minimally increased values of amylase and lipase activity discovered through laboratory tests, which initially physicians interpreted as symptoms of pancreatic disease.

The radiologist who first described multidetector computed tomography and magnetic resonance imaging signs did not explore the vascular structures with multiplanar reconstructions, and hypothesized aneurysm not as a primary diagnosis, but as a consequence of a giant mass in the pancreatic tissue. Pre-angiographic evaluation of multiplanar reconstruction, performed with other colleagues, finally oriented him towards diagnosing a giant aneurysm ruptured into the uncinate process.

Significant advancements in 3D and multiplanar imaging software have made it possible to obtain high-resolution images of the abdominal aorta and its branches: radiologists need to keep in mind the diagnostic value of multiplanar reconstructions. In some cases pancreatic masses, for example, pseudocysts, on unenhanced CT scans and MRI have the same density or intensity signals as aneurysms. Contrast administration helps radiologists to reach the correct diagnosis. Reference: Palmucci S, Mauro LA, Milone P, Di Stefano F, Scolaro A, Di Cataldo A, Ettorre GC. Diagnosis of ruptured superior mesenteric artery aneurysm mimicking a pancreatic mass. *World J Gastroenterol* 2010; 16(18): 2298-2301 <u>http://www.wjgnet.com/1007-9327/full/v16/i18/2298.htm</u> Correspondence to: Stefano Palmucci, MD, Department DOGIRA, Section of Radiological Sciences, "Policlinico – Vittorio Emanuele" University Hospital, Via Santa Sofia 78, 95123 Catania, Italy. <u>spalmucci@sirm.org</u> Telephone: +39-95-3782360 Fax: +39-95-3782360

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