

clinical and paraclinical picture, as it may represent the first indicator of a life-threatening systemic disorder.

Keywords: hyperkalemia, Addison disease, food poisoning, cortisol

IMAGING DIAGNOSIS OF EMPHYSEMATOUS NECROTIZING PANCREATITIS

Daria Constantinov, Carolina Sanduța

Catedra de radiologie și imagistică, Facultatea de Reziidențiat, USMF “Nicolae Testemițanu”, Republica Moldova

Background. Emphysematous necrotizing pancreatitis (ENP) is a severe form of acute pancreatitis, characterized by infected necrosis and accumulation of intra- and peripancreatic gas. Early diagnosis via computed tomography (CT) is essential for evaluating inflammation extent and guiding therapy.

Objective(s). To evaluate the performance of computed tomography in diagnosing emphysematous necrotizing pancreatitis and to compare its effectiveness with other imaging methods used in clinical practice.

Materials and methods. A retrospective observational study was conducted, based on CT image analysis and clinical data of patients diagnosed with emphysematous necrotizing pancreatitis. Methods included contrast-enhanced CT, abdominal ultrasound, and magnetic resonance imaging. Necrosis, gas, fluid collections, and inflammation extent were analyzed.

Results. CT is the gold standard in imaging evaluation of emphysematous necrotizing pancreatitis because it rapidly and accurately detects inhomogeneous parenchymal necrosis, intrapancreatic and peripancreatic fluid collections, and air in infectious foci. Abdominal ultrasound is limited by intestinal gas and reverberation artifacts, while magnetic resonance imaging, though offering excellent tissue resolution, is less accessible. Contrast-enhanced CT provides essential data for assessing inflammation severity, staging necrosis, and identifying complications. Recent studies confirm contrast-enhanced CT as the reference standard in ENP management.

Conclusion(s). Early and accurate diagnosis of emphysematous necrotizing pancreatitis by contrast-enhanced CT is an essential element in assessing the extent of necrosis and associated complications. Recent studies reinforce the role of CT as the imaging method of reference, superior to other techniques.

Keywords: emphysematous necrotizing pancreatitis, CT, medical imaging

IMAGING DIAGNOSIS OF INTRAHEPATIC VOLUME FORMATIONS

Carolina Sanduta, Adrian Hotineanu

USMF “Nicolae Testemițanu”, Republica Moldova

Background. Liver nodules can occur both on the background of non-cirrhotic and cirrhotic liver. Early diagnosis through CT and MRI imaging examinations of benign and malignant liver lesions is essential for evaluating imaging criteria, assessing the extent of the tumor process, and establishing therapeutic management.

Objective(s). Evaluation of imaging performance by CT and MRI in the diagnosis of benign and malignant liver tumors and comparison of the efficiency of each imaging method in current clinical practice.

Materials and methods. In a retrospective, observational study, 200 patients with benign and malignant liver formations were selected from January 2021 to January 2025. The imaging criteria included: dimensions, structure, extension of the tumor process and vascular invasion in malignant tumors. Sensitivity, specificity, PPV and NPV were evaluated.