

# Evidence Discussion

(AB 33.4) **EviCore**  
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Abdominal imaging is required in differential evaluation of elevated serum amylase and/or lipase levels, and can confirm the diagnosis of acute pancreatitis. Biliary duct dilation and stone disease are readily apparent on ultrasound performed as the initial imaging study.

When overlying bowel gas or other patient factors render ultrasound inconclusive, or when elevations persist in amylase and/or lipase, CT or MRI should be considered next. In acute pancreatitis, contrast-enhanced CT (CECT) provides over 90% sensitivity and specificity but its routine use is unwarranted when the diagnosis is apparent in many patients, and most have a mild, uncomplicated course.

In a patient failing to improve after 48–72 hours (e.g., persistent pain, fever, nausea, unable to begin oral feeding), contrast CT or MRI imaging is recommended to assess for possible local complications such as pancreatic necrosis, duct-obstructing tumors, or anatomic/physiologic anomalies (e.g, pancreas divisum and sphincter of Oddi dysfunction, respectively). CT and MRI are comparable in the early assessment of acute pancreatitis, but magnetic resonance cholangiopancreatography (MRCP) best detects choledocholithiasis and pancreatic duct disruption without x-ray exposure while providing high-quality imaging for diagnostic and/or severity purposes. MRI is also helpful in patients with a contrast allergy and renal insufficiency where T2-weighted images without gadolinium contrast can diagnose pancreatic necrosis.<sup>1</sup>

## References

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