

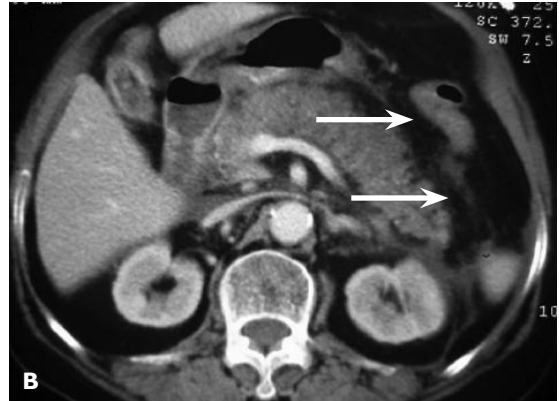
## Turner's Sign

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**A** 65-year-old man presented to the emergency department with sudden-onset abdominal pain that radiated to the back, progressive abdominal distention, and a blue/red/purple discoloration of the flanks (**Image A**). There was no history of recent abdominal trauma or liver disease. On initial physical examination, blood pressure was 90/60 mm Hg, heart rate was 114 bpm, respiratory rate was 24 breaths/min, and axillary body temperature was 98.2°F. Laboratory test results at admission were: hematocrit, 24%; hemoglobin, 8 g/dL; white blood cell count, 21,600 cells/ $\mu$ L; platelets, 141,000 cells/ $\mu$ L; glucose, 297 mg/dL; serum creatinine, 2.2 mg/dL; alanine aminotransferase, 98 U/L; aspartate aminotransferase, 136 U/L; lactate dehydrogenase, 1009 U/L; total serum bilirubin, 2.3 mg/dL; total serum protein, 5.9 g/dL; albumin, 2.1 g/dL; and calcium, 7.8 g/dL. Prothrombin time and partial thromboplastin time were normal. Serum amylase was elevated at 1510 U/L, and  $Po_2$  was 52 mm Hg. Abdominal computed tomography confirmed the diagnosis of pancreatitis and showed prominent peripancreatic inflammatory changes and necrosis of more than 50% of the pancreatic parenchyma (**Image B**). The patient was transferred to the intensive care unit. Despite respiratory support and intravenous fluid resuscitation, the patient died due to severe acute pancreatitis 4 hours after admission.

Acute pancreatitis is characterized by varying degrees of pancreatic injury, ranging from an edematous and interstitial process in mild disease to extensive pancreatic

and peripancreatic necrosis in severe disease.<sup>1</sup> The most severe form of acute pancreatitis has been reported to result in mortality rates ranging from 20% to 50%.<sup>2</sup> This patient presented with Turner's sign, or ecchymosis of the flanks, a clinical finding associated with severe acute pancreatitis. Turner's sign occurs as a result of blood dissecting from retroperitoneal areas along fascial planes. Conditions associated with Turner's sign include hemorrhagic pancreatitis, blunt abdominal trauma, ruptured abdominal aortic aneurysm, ruptured/hemorrhagic ectopic pregnancy, and spontaneous bleeding secondary to coagulopathy (congenital or acquired). Cullen's sign, or periumbilical ecchymosis, may occur in conjunction with Turner's sign, especially in cases of retroperitoneal hemorrhage. These signs are important indicators of severe acute pancreatitis and have been associated with a 37% mortality rate in acute pancreatitis.<sup>3</sup> However, they rarely occur in acute pancreatitis and do not emerge until 24 to 48 hours after the onset of symptoms. **HP**

### REFERENCES

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