



CASE REPORT

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Cullen's Sign in Severe Acute Pancreatitis**Mohamed Hajri, Wael Ferjaoui*, Sahir Omrani and Rached Bayar**

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A 58-year-old woman, with a history of diabetes and hypertension, presented with vomiting and severe epigastric pain for 3 days. Physical examination showed a blood pressure of 110/70 mmHg, pulse rate of 100 beats per minute, respiratory rate of 20 breaths and oxygen saturation of 96% on room air. Abdominal examination showed epigastric tenderness with bruising in the subcutaneous fatty tissue around the periumbilical region, consistent with Cullen's sign. Laboratory investigations showed elevated serum lipase level (1780 U/L, reference range <90U/L) and hence the diagnosis of acute pancreatitis was confirmed. Abdominal ultrasonography revealed cholelithiasis without evidence of choledocolithiasis. Computed tomography was performed and showed a necrotizing pancreatitis with several peripancreatic fluid collections (Balthazar grade E). The patient's condition rapidly deteriorated with multi-organ failure requiring her transfer to the intensive care unit. She died 2 days after hospitalization.

Cullen's sign was first described in 1918 by Thomas S. Cullen, a Canadian gynecologist, in association with a ruptured ectopic pregnancy [1].

It is a rarely seen clinical sign that consists of a periumbilical ecchymosis, and suggests severe intra-abdominal pathology [2].

It results from the tracking of haemorrhagic fluid from the retroperitoneum along the gastrohepatic, falciform and round ligament to the subcutaneous periumbilical tissues [2, 3].

Although not specific, it has been historically associated with acute necrotizing pancreatitis and high mortality [2, 4].

Early identification of Cullen's sign is imperative and should lead physicians to promptly start intensive supportive care.

**References**

1. Cullen T. A new sign in ruptured extrauterine pregnancy. *Am J Obstet* 1918; 78: 457-460.
2. Rahbour G, Ullah MR, Yassin N, Thomas GP. Cullen's sign—Case report with a review of the literature. *Int J Surg Case Rep* 2012; 3: 143-146.
3. Harris S, Naina HV. Cullen's sign revisited. *Am J Med* 2008; 121: 682-683.
4. Wright WF. Cullen sign and Grey Turner sign revisited. *J Osteopath Med* 2016; 116: 398-401.

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