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Wunderlich Syndrome secondary to severe acute pancreatitis

Xiangyu Du[1], Xin Fu[1], Lianyang Zhang[2] and Xiaojuan Shao[1]

1.Department of Gastroenterology, Daping Hospital, Army Medical University, Chongqing, China.

2.Wound trauma medical Center, State Key Laboratory of Trauma, Burns and Combined Injury,Daping Hospital, Army Medical University, Chongqing, China

Correspondence: Xiaojuan Shao. E-mail: sxj2001911@163.com

ABSTRACT

Wunderlich Syndrome (WS) is a rare, spontaneous, atraumatic retroperitoneal renal hemorrhage into the perirenal and subcapsular spaces. WS has not been previously reported in secondary to severe acute pancreatitis (SAP), and this rare incidence may lead to difficulties in early clinical diagnosis, possibly affecting patient outcome. We present a case of WS secondary to SAP. Clinicians should be aware of the possibility of WS in patients with pancreatitis who present with flank pain and shock.

CASE REPORT

A 35-year-old man was diagnosed with severe acute pancreatitis (SAP). CT showed inflammation changes of the pancreas and peripancreatic tissue, known as pseudocyst formation (Fig.1). The patient subsequently heard a clicking noise in his abdomen, followed by left low back pain and abdominal distension with palpitation and hemodynamic instability (Fig.2). Blood tests showed a high white blood cell count (38.2x109/L) and low hemoglobin (55g/L). CT revealed a massive subcapsular hematoma of the left kidney that filled the left abdominal cavity. There was also extravasation of contrast at the inferior pole of the left kidney (Fig.3). The patient underwent renal artery angiogram and embolization, but bleeding persisted. He accepted surgical treatment. An intraperitoneal examination reviewed a large hematoma containing numerous blood clots. The inferior pole of the left kidney had a longitudinal irregular tear with blood actively oozing out. The patient recovered favorably after surgery.

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DISCUSSION

Wunderlich Syndrome (WS) is a spontaneous, atraumatic retroperitoneal renal hemorrhage into the perirenal and subcapsular spaces (1). It is a rare clinical syndrome (2). The typical clinical manifestations are acute flank or abdominal pain, a palpable flank mass, and hypovolemia. Abdominal contrast-enhanced CT can be used to make a definitive diagnosis and identify perirenal haemorrhage (3). Angiographic embolization is recommended, and surgical therapy has been the most efficient method to deal with this emergency situation. SAP complicated with WS is extremely rare. Clinicians should be aware of the possibility of WS in patients with pancreatitis who present with flank pain and shock.

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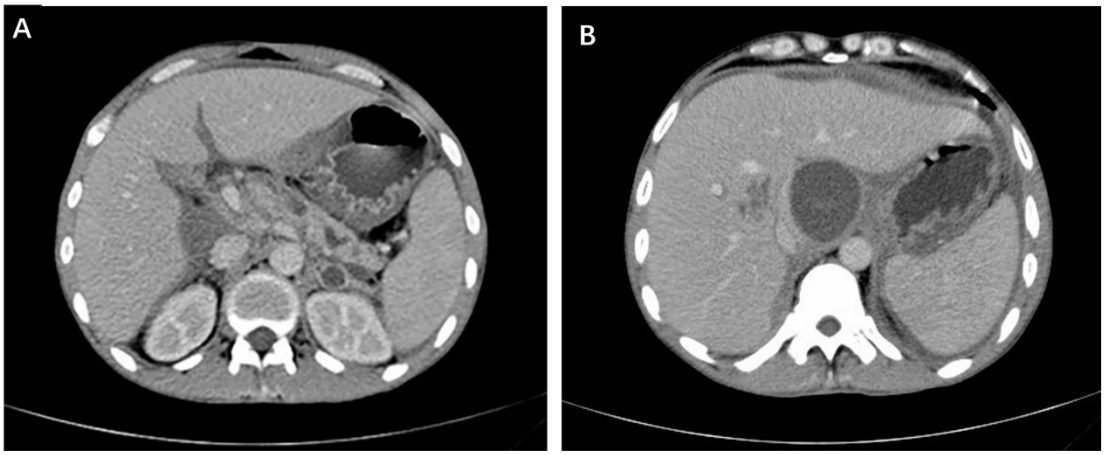

FIG.1. CT scan showed inflammation changes of the pancreas and peripancreatic tissue(A), pseudocyst formation(B)

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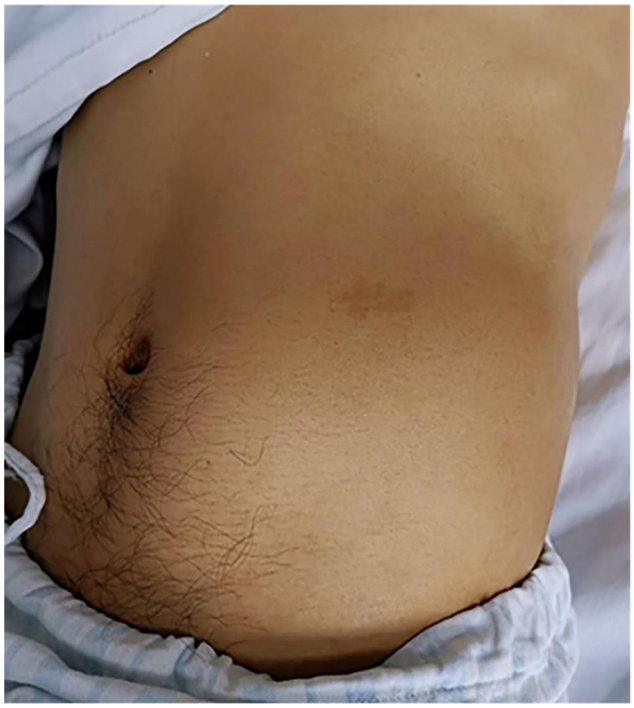

FIG.2. The patient had distention of the left abdomen and lateral waist

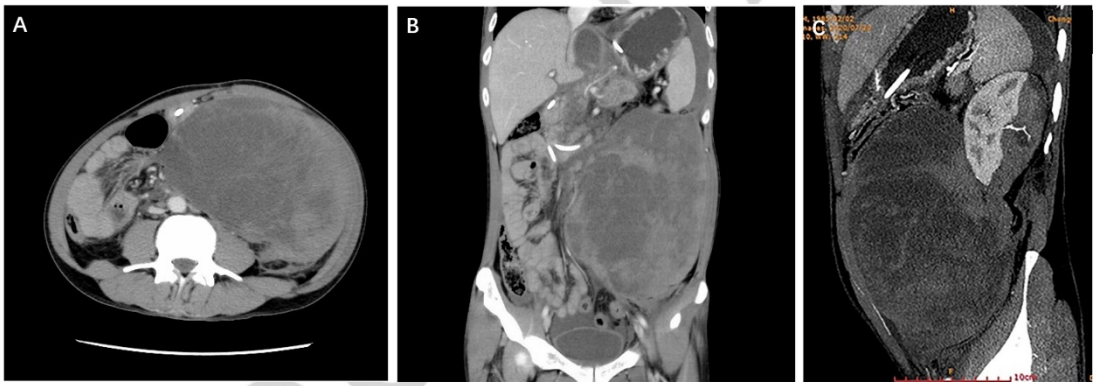

FIG.3 CT scan showed a massive subcapsular hematoma of the left kidney that filled the left abdominal cavity (A, B). There was extravasation of contrast at the inferior pole of the left kidney(C).