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Pazopanib-Induced Severe Acute Pancreatitis

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Key Words
Angiosarcoma · Pazopanib · Drug-induced acute pancreatitis

Abstract
Pazopanib is an oral angiogenesis inhibitor targeting vascular endothelial growth factor receptors, platelet-derived growth factor receptors, and c-Kit approved for the treatment of renal cell carcinoma and soft tissue sarcoma. Nonselective kinase inhibitors, such as sunitinib and sorafenib, are known to be associated with acute pancreatitis. There are few case reports of severe acute pancreatitis induced by pazopanib treatment. We present a case of severe acute pancreatitis caused by pazopanib treatment for cutaneous angiosarcoma. The patient was an 82-year-old female diagnosed with cutaneous angiosarcoma. She had been refractory to docetaxel treatment and began pazopanib therapy. Three months after pazopanib treatment, CT imaging of the abdomen showed the swelling of the pancreas and surrounding soft tissue inflammation without abdominal pain. After she continued pazopanib treatment for 2 months, she presented with nausea and appetite loss. Abdominal CT showed the worsening of the surrounding soft tissue inflammation of the pancreas. Serum amylase and lipase levels were 296 and 177 IU/l, respectively. She was diagnosed with acute pancreatitis induced by pazopanib treatment and was managed conservatively with discontinuation of pazopanib, but the symptoms did not improve. Subsequently, an abdominal CT scan demonstrated the appearance of a pancreatic pseudocyst. She underwent endoscopic ultrasound-guided pseudocyst drainage using a flared-end fully covered self-expandable metallic stent. Then, the symptoms resolved without recurrence. Due to the remarkable progress of molecular targeted therapy, the oncologist should know that acute pancreatitis was recognized as a potential adverse event of pazopanib treatment and could proceed to severe acute pancreatitis.

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Introduction

Pazopanib is an oral angiogenesis inhibitor targeting vascular endothelial growth factor receptors, platelet-derived growth factor receptors, and c-Kit approved for the treatment of renal cell carcinoma and soft tissue sarcoma [1, 2]. Nonselective kinase inhibitors, such as sunitinib and sorafenib, are known to be associated with acute pancreatitis [3]. There are few case reports of severe acute pancreatitis induced by pazopanib treatment. We present a case of severe acute pancreatitis caused by pazopanib treatment for cutaneous angiosarcoma.

Case Report

The patient was an 82-year-old female diagnosed with cutaneous angiosarcoma. She had been refractory to docetaxel treatment and began pazopanib therapy. Three months after pazopanib treatment, CT imaging of the abdomen showed the swelling of the pancreas and surrounding soft tissue inflammation without abdominal pain. After she continued pazopanib treatment for 2 months, she presented with nausea and appetite loss. Abdominal CT showed the worsening of the surrounding soft tissue inflammation of the pancreas. Serum amylase and lipase levels were 296 and 177 IU/l, respectively. She was diagnosed with acute pancreatitis induced by pazopanib treatment. She was managed conservatively with discontinuation of pazopanib, but the symptoms did not improve. Subsequently, an abdominal CT scan demonstrated the appearance of a pancreatic pseudocyst (fig. 1). She underwent endoscopic ultrasound-guided pseudocyst drainage using a flared-end fully covered self-expandable metallic stent. Then, the symptoms resolved without recurrence.

Discussion

Hyperamylasemia and hyperlipasemia are well-known adverse events of multikinase inhibitors, but little is known about the association to acute pancreatitis [4]. Although the severity of pancreatitis is usually mild, focal, and managed conservatively by discontinuation of treatment [5, 6], our case progressed to severe acute pancreatitis requiring endoscopic drainage in spite of the discontinuation of pazopanib. The diagnosis of drug-induced pancreatitis is sometimes difficult [7]. Due to the remarkable progress of molecular targeted therapy, the oncologist should know that acute pancreatitis was recognized as a potential adverse event of pazopanib treatment and could proceed to severe acute pancreatitis.

Statement of Ethics

The authors have no ethical conflicts to disclose.

Disclosure Statement

The authors have no conflicts of interest or funding to disclose.

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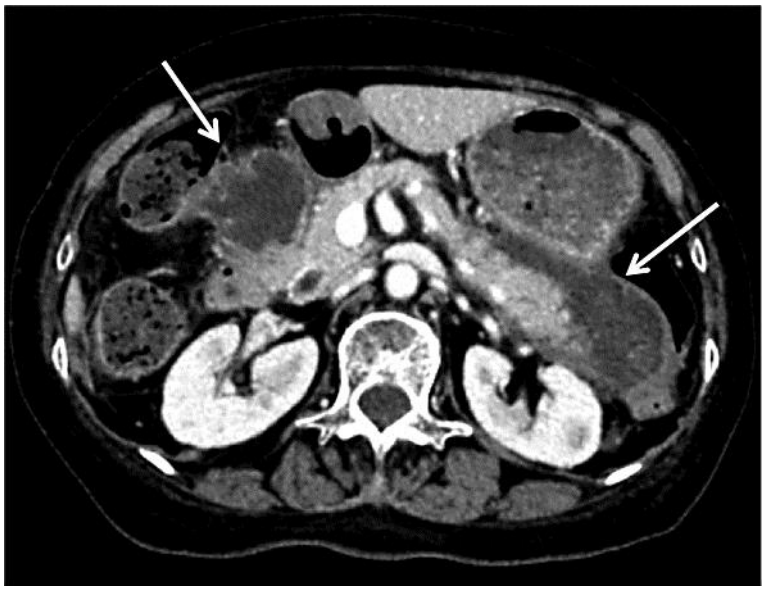

Fig. 1. Abdominal CT scan showing a pseudocyst (arrows) in the head and tail of the pancreas.

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