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Pancreatic Tail Cancer with Sole Manifestation of Left Flank Pain: A Very Rare Presentation

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Pancreatic cancer is sometimes called a "silent disease" because it often causes no symptoms in the early stage. The symptoms can be quite vague and various depending on the location of cancer in the pancreas. The anatomic site distribution is 78% in the head of the pancreas, 11% in the body, and 11% in the tail. Pancreatic cancer is rarely detected in the early stage, and it is very uncommon to diagnose pancreatic tail cancer during an emergency department visit. The manifestation of pancreatic tail cancer as left flank pain is very rare and has seldom been identified in the literature. We present a case of pancreatic tail cancer with the sole manifestation of dull left flank pain. Having negative findings on an ultrasound study initially, this female patient was misdiagnosed as having possible acute gastritis, urolithiasis or muscle strain after she received gastroendoscopy and colonofiberscopy. Her symptoms persisted for several months and she visited our emergency department due to an acute exacerbation of a persistent dull pain in the left flank area. Radiographic evaluation with computed tomography was performed, and pancreatic tail tumor with multiple metastases was found unexpectedly. We review the literature and discuss this rare presentation of pancreatic tail cancer.

Key Words: flank pain, metastatic adenocarcinoma, pancreatic tail cancer, renal colic
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Pancreatic cancer is sometimes difficult to diagnose because it often gives rise to no clear symptoms in the early stage. The symptoms can be quite vague, and they can vary depending on the location of cancer in the pancreas. Pancreatic cancer is rarely detected at an early stage, and it is also uncommon to diagnose pancreatic tail cancer during an emergency department (ED) visit. The manifestation of pancreatic tail cancer as left flank pain is very rare and has seldom been identified in the literature. We present a patient with undiagnosed pancreatic tail cancer with a rare presentation of only persistent left flank pain.

Case Presentation

A 46-year-old woman presented to our ED with a history of dull, constant left flank pain in the previous 2 months. Lower abdominal pain had started about 10 months previously, which prompted her to visit an obstetrician/gynecologist. An echogram was performed without remarkable findings. Then, she went to see a gastroenterologist, who performed gastroendoscopy and colonofiberoscopy. These invasive procedures also revealed no obvious lesion. She received regular follow-up at a district hospital and was treated for acute gastritis, renal colic and muscle strain for some time. She then came to our ED for assistance after

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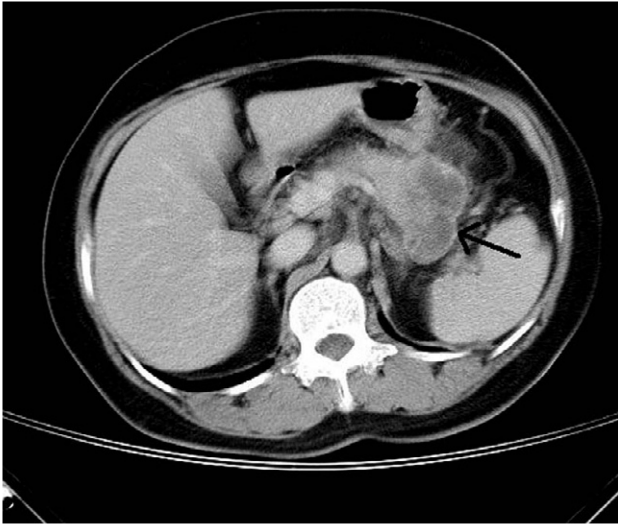

Figure. *Computed tomography shows pancreatic tail tumor with regional lymphadenopathies (along the aortocaval and paraaortic regions). The tissue plane between the tumor and its adjacent high body of the stomach is obscured, suggesting direct tumor invasion.*

one further severe episode of persistent dull pain over the left flank area. She denied having fever, chills, or rigors. She also denied smoking or drinking alcohol, and had no other history of disease. A physical examination revealed prominent left flank pain with percussion, but was otherwise unremarkable; bowel sounds were normoactive, stool and urine passage were relatively smooth, and no obvious body weight loss was noted.

Laboratory data, including amylase and lipase, were all within the normal ranges. Her urinary analysis was also normal. Thoracolumbar spinal X-ray with anteroposterior and lateral views was performed to rule out spinal disease, but multiple lung masses were found incidentally. Therefore, abdominal computed tomography was performed under the impression of metastatic lung lesions to search for the origin of the malignancy. Computed tomography showed pancreatic tail cancer with regional lymphadenopathies (along the aortocaval and paraaortic regions) and metastatic nodules in bilateral lungs, the left pleural space, liver, and bilateral paracolic gutters. The tissue plane between the pancreatic cancer and its adjacent high body of the stomach was obscured, suggesting direct tumor invasion (Figure).

She was admitted to our hospital for further treatment with needle aspiration of the liver metastasis tumor. Adenocarcinoma was proven by pathology. Due to multiple metastases, she only received systemic chemotherapy. Unfortunately, the treatment showed no remarkable effects and she died 81 days after her first visit to our ED.

Discussion

Pancreatic carcinoma is a devastating disease with the worst prognosis of all solid tumors. It is one of the most lethal malignancies, as indicated by a mortality of 98% [1]. Almost all patients are inoperable at the time of diagnosis and can only be given palliative treatment. Factors associated with an increased risk of pancreatic cancer include smoking, chronic pancreatitis, diabetes, prior gastric surgery, and exposure to radiation or chemicals such as chlorinated hydrocarbon solvents [2–4].

The symptoms of pancreatic cancer are vague. They vary depending on where the cancer is located in the pancreas, with the anatomic site of cancer distribution being the head of the pancreas in 78% of cases, the body in 11%, and the tail in 11% [5]. For cancers in the head of the pancreas, painless jaundice is often the first sign, and upper abdominal pain may be a subsequent complaint as the tumor grows. If the cancer is in the body or tail, weight loss and pain in the middle of the back may be the first symptoms to develop. Nevertheless, left flank pain as a presentation of pancreatic tail adenocarcinoma is rarely mentioned. In a review of the literature, we were unable to identify a report specifically mentioning "left flank pain" as an isolated finding in a patient with pancreatic tail cancer.

Flank pain is a very common reason for ED visits. The most common cause of left flank pain is renal colic. However, in a significant percentage of patients, pain believed to be caused by renal calculi actually has another source. These causes other than renal calculi include abnormalities of the gastrointestinal and gynecologic systems, as well as other abnormalities of the genitourinary system. Some very rare etiologies, such as acute pancreatitis [6], pulmonary thromboembolism [7], spleen or renal infarction [8], and carcinomas, have been reported. In our patient, the only symptom was persistent dull left flank pain, which led to a wide range of misdiagnoses, even though she was seen by many specialists who also performed several different investigations. If we had not obtained a thoracolumbar spinal X-ray, and the finding had not

indicated a need for abdominal computed tomography, we might have misdiagnosed this case as well. Unfortunately, even though the underlying cause was finally identified, the window for treatment of up to 10 months had been lost, and the disease was at a stage beyond effective control.

There are many pitfalls in the diagnosis of left flank pain, a daily encountered complaint. Should renal colic or other genitourinary tract problems be excluded, then high suspicion must be given to other uncommon, but probably serious, etiologies. Using unenhanced helical computed tomography (UHCT) in the evaluation of flank pain to make a differential diagnosis has drawn some attention recently [9]. Among the major series published on the subject, the incidence of unsuspected clinical entities was 10–15% [9–13]. Therefore, in a patient with persistent flank pain, if the urine analysis is normal and there is no obvious urinary tract anomaly, then use of UHCT is highly recommended to identify less common but probably serious diseases, such as in our case.

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胰尾部惡性腫瘤單一左側腰痛之表現
— 病歷報告

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胰臟癌有時後被稱為“沉默的疾病”，因為它在早期沒有甚麼症狀。由於症狀模糊，一般都是看其解剖位置表現。而位於胰頭部約佔 **78%**；**11%** 位於體部；**11%** 位於尾部。胰臟癌很少早期被發現，而且很少胰臟尾部癌在急診被診斷出來。胰臟尾部癌單純以左腰痛來表現是很少見，而且在文獻中很少被提及。我們報告一個胰臟尾部癌的病患單獨以左側腰部悶痛為表現。在一開始以超音波檢查沒有發現後，胃鏡及大腸鏡的檢查下，她被當成胃炎，腎結石，及肌肉拉傷治療。她的症狀遲續了好幾個月後因為左腰鈍痛加劇後來急診。在電腦斷層的使用下我們意外發現了胰臟尾部腫瘤，所以我們回顧了文獻並討論此胰臟尾部癌之不尋常表現。

關鍵詞：腰痛，轉移癌，胰尾癌，腎結石痛

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