ELSEVIER

Clinical Imaging 33 (2009) 240–243

CLINICAL IMAGING

Extramedullary plasmacytoma of the pancreas and jejunum

Pramod Gupta*, Gregg D. Rice, KiAnne Abraham, Vidisha Ghole, Manoj Ketkar

Radiology Service, Dallas VA Medical Center, VA North Texas health care system, 4500, South Lancaster Road, Dallas, TX 75216, USA

Received 15 October 2008; accepted 1 December 2008

Abstract

Plasmacytomas occurring in the gastrointestinal tract are extremely rare. We report one such case of pancreatic and jejunal plasmacytoma in a single patient with known multiple myeloma with emphasis on computed tomographic (CT) findings.
Published by Elsevier Inc.

Keywords: Extramedullary plasmacytoma; Plasmacytoma

1. Introduction

Plasma cell neoplasms may present as multiple myeloma, solitary myeloma of the bone, plasma cell leukemia, or as extramedullary plasmacytoma (EMP) [1,2]. Extramedullary plasmacytoma of the pancreas and gastrointestinal tract, either isolated or in association with multiple myeloma, is extremely rare [3–6]. We report a very rare case of pancreatic and jejunal plasmacytoma in a single patient with known multiple myeloma with emphasis on computed tomographic (CT) findings. Such concurrence has not been reported before in radiology literature and, to the best of our knowledge, CT imaging features of jejunal involvement have not been described before.

2. Case report

A 59-year-old white male patient with light chain myeloma (IgA-K type) diagnosed by fine-needle aspiration of sternal mass 1 year ago was admitted with a rapid increase in the size of this mass and excruciating pain for radiation treatment and pain management. Multiple myeloma survey radiographs done at the time of initial diagnosis had also demonstrated additional bone involvement with lytic lesions in bilateral distal clavicles, right iliac bone, and right proximal femur. Serum and urine protein electrophoresis results were normal; however, he had elevated kappa/lambda ratio in the serum. The patient had refused bone marrow biopsy due to his inability to lie flat. His serum bilirubin and liver function test results were normal at the time of initial diagnosis. He was treated with thalidomide and dexamethasone and did well for 6–7 months with decrease in size of the sternal mass. However, during the last few months before this admission he noticed a regrowth of the sternal mass with increasing pain. Thalidomide was substituted with lenalidomide a few weeks prior with little response. At the time of admission he showed further increase in serum kappa/lambda ratio. Serum total bilirubin was normal (0.7 mg/dl; normal range 0–1 mg/dl) and liver function test results were also normal. He did not do well during the hospitalization and after 1 month he was noticed to have jaundice with markedly elevated serum total bilirubin of 17.0 mg/dl and also elevated liver function test results. Ultrasound was performed which showed a lobulated hypoechoic avascular mass in the region of the pancreatic head with mild through transmission of ultrasound beam (Fig. 1). Dilated common bile duct and intrahepatic biliary ducts were also noted. The CT scan showed a homogeneous isodense 4×4-cm mass in the pancreatic head with enhancement similar to pancreatic parenchyma with mildly dilated pancreatic duct and

* Corresponding author. 2704, Oates Drive, Plano, TX 75093. Tel.: +1 214 857 0185; fax: +1 775 855 4624.
E-mail address: pramodvagisha@hotmail.com (P. Gupta).

0899-7071/09/$ – see front matter. Published by Elsevier Inc.
doi:10.1016/j.clinimag.2008.12.006

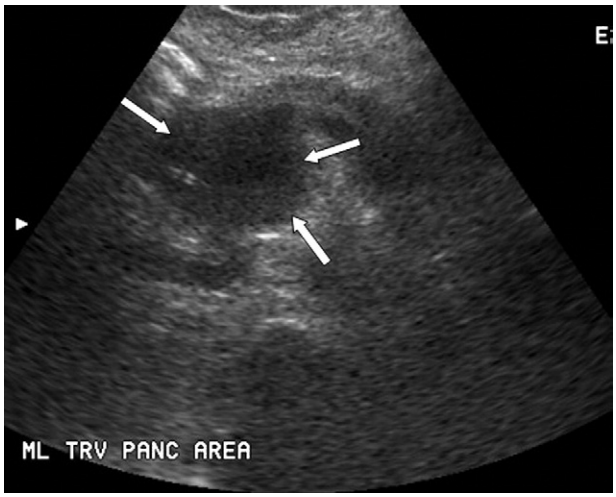

Fig. 1. Transverse ultrasound image of the pancreas shows a hypoechoic mass in the region of the head (arrows) with mild through transmission of ultrasound beam.

moderately dilated biliary ducts (Fig. 2). The differential diagnosis included plasmacytoma as the patient had multiple myeloma, primary adenocarcinoma, metastasis, and lymphoma. Incidentally, it was also found that there was multilobulated eccentric nodular wall thickening of an approximately 6-cm-long segment of the mid jejunum with poor contrast enhancement (Fig. 3). There was no evidence of bowel obstruction or abdominal lymphadenopathy. The differential diagnoses for the jejunal lesion considered were plasmacytoma, gastrointestinal stromal tumor, primary adenocarcinoma, lymphoma, and metastases. Endoscopic ultrasound demonstrated a mass in the pancreatic head encasing the common bile duct and invading the portal vein. The fine-needle aspiration showed multiple sheets of atypical plasma cells. The patient was considered inoperable. An ERCP was attempted to place a biliary stent for palliative treatment, but it was unsuccessful. An external–internal biliary drainage catheter was placed via a percutaneous approach. His condition kept deteriorating and 4 weeks later he died of respiratory and cardiac failure.

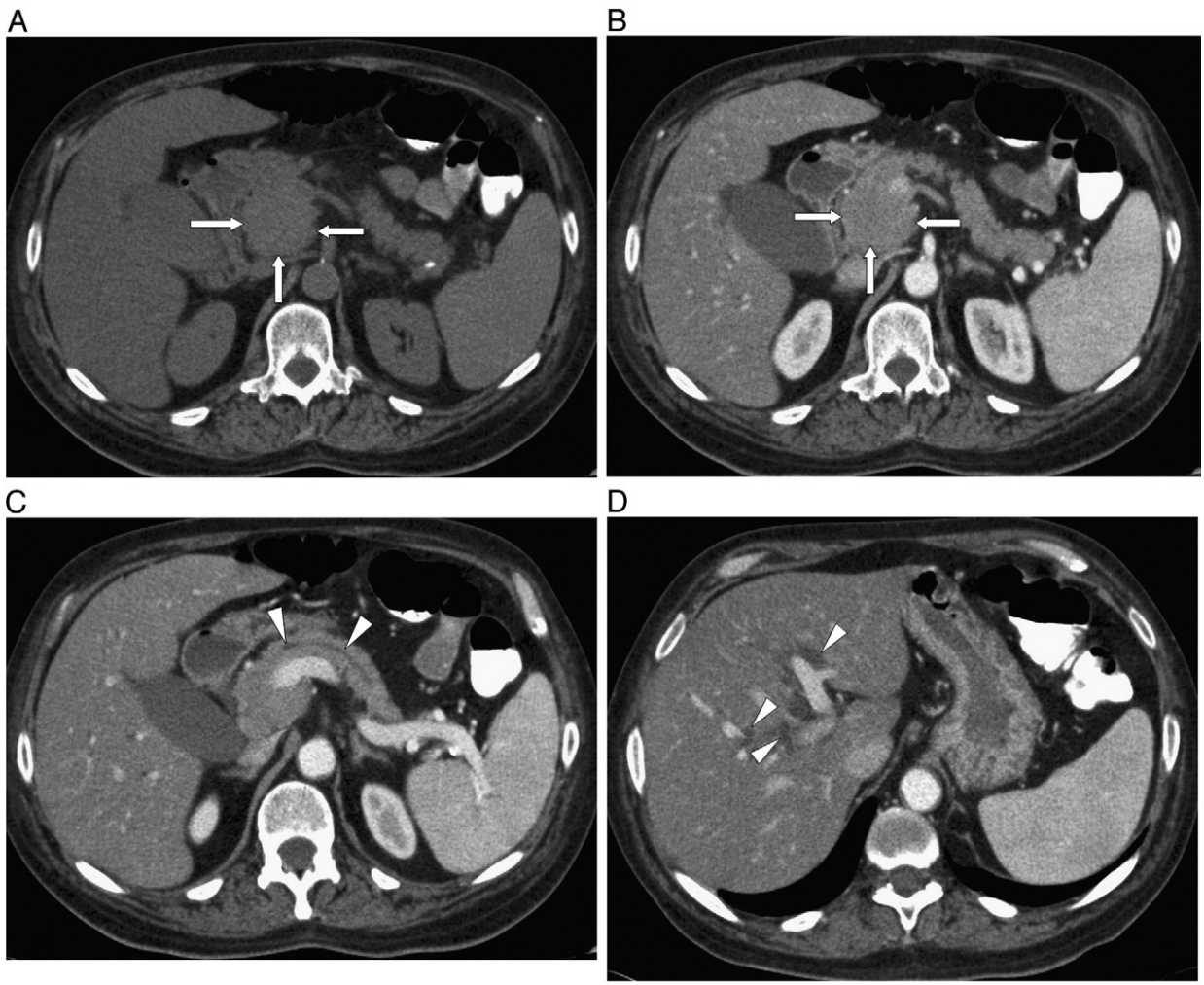

Fig. 2. Transverse CT scan images at the level of the pancreatic head without (A) and with intravenous contrast (B) show homogeneous isodense solid mass in the pancreatic head (arrows) with contrast enhancement similar to the rest of the pancreas. Slightly higher contrast images (C and D) show mild pancreatic ductal dilatation (arrowheads in C) and biliary ductal dilatation (arrowheads in D), respectively.