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CONTINUING MEDICAL EDUCATION
ΣΥΝΕΧΙΖΟΜΕΝΗ ΙΑΤΡΙΚΗ ΕΚΠΑΙΔΕΥΣΗ

Surgery Quiz – Case 14

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ΑΡΧΕΙΑ ΕΛΛΗΝΙΚΗΣ ΙΑΤΡΙΚΗΣ 2018, 35(4):572–573

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An otherwise healthy 76-year-old female patient referred to our Surgical Department owing to progressive jaundice. At initial presentation jaundice, palpable spleen and palpable firm, as well as fixed bilateral inguinal lymph nodes were present. Laboratory studies revealed a significant increase in serum total bilirubin (27.10 mg/dL), alkaline phosphatase (294 IU/L), γ-glutamyl transferase (113 IU/L), LDH (856 IU/L) and CA 19-9 (147 IU/mL). Initial abdominal computed tomography (CT) demonstrated an ill-defined pancreatic head mass along with mesenteric and paraaortic lymph nodes enlargement. Dynamic pancreatic CT revealed a bulky, nodular type, solitary, homogenous, hypoattenuating 4×5 cm pancreatic head mass with pancreatic and common bile duct dilatation and pancreatic body and tail atrophy. Dynamic magnetic resonance imaging (MRI) demonstrated a bulky circumscribed poorly enhanced mass in the pancreatic head with normally enhanced adjacent pancreatic parenchyma (figures 1 and 2).

What is your diagnosis?

(a) Pancreatic adenocarcinoma

(b) Secondary pancreatic lymphoma

(c) Primary pancreatic lymphoma

(d) Other secondary pancreatic neoplasm

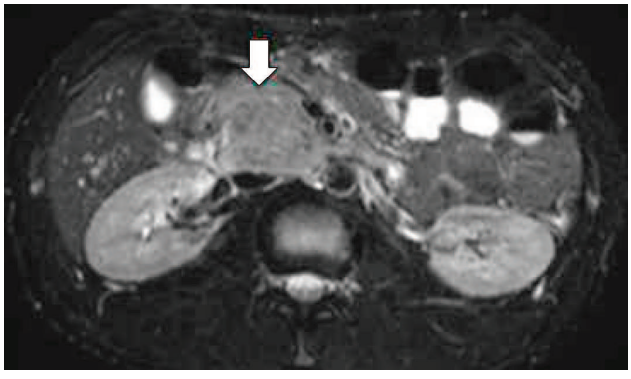

Figure 1. Fat-suppressed T2-weighted magnetic resonance (MR) image shows a bulky circumscribed homogeneously hyperintense mass in the pancreatic head (red arrow).

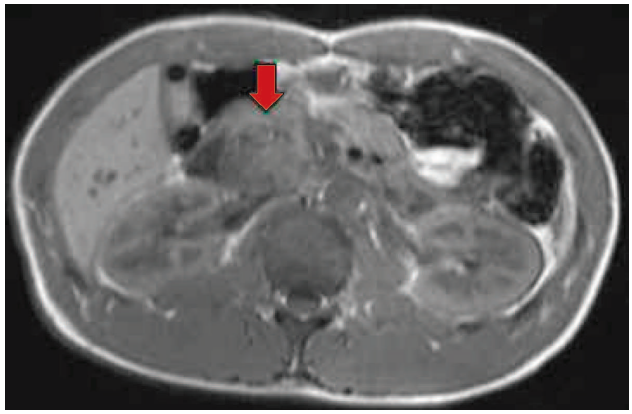

Figure 2. Fat-suppressed T1-weighted magnetic resonance (MR) image shows a hypointense mass in the pancreatic head (red arrow) relative to adjoining normal pancreatic parenchyma.

Comment

In the present case, the existence of a dominant pancreatic mass with distal lymphadenopathy such as paraaortic, mesenteric and inguinal lymphadenopathy confined differential diagnosis to secondary pancreatic lymphoma and advanced pancreatic adenocarcinoma. The present pancreatic mass did not fulfill the criteria of primary pancreatic lymphoma, which are: (a) No evidence of palpable superficial lymphadenopathy; (b) no enlargement of mediastinal lymph nodes; (c) normal leukocyte count; (d) dominant pancreatic mass peripancreatic involved lymph nodes; and (e) no hepatic or splenic involvement. Furthermore, the diagnosis of other secondary pancreatic neoplasm was excluded as the patient had no previous history of malignancy and staging did not reveal a synchronous cancer.

The patient was a female in the seventh decade of her life. Jaundice was the predominant symptom and level of CA 19.9 was elevated. The above clinical characteristics accounted more for pancreatic adenocarcinoma. In the setting of a pancreatic lymphoma, patients are usually in the fifth and sixth decade of life, jaundice

is not the predominant symptom and CA 19.9 level is normal. On the contrary, the presence of inguinal, paraaortic and mesenteric lymphadenopathy on CT accounted more with the diagnosis of secondary pancreatic lymphoma as it could not be explained by an advanced pancreatic adenocarcinoma. Moreover, imaging characteristics of the present pancreatic mass were highly suggestive of pancreatic lymphoma; key imaging findings for differential diagnosis include: (a) pancreatic lymphoma is better marginated and demarkated compared to normal parenchyma than adenocarcinoma which enhance less due to the desmoplastic reaction, (b) vascular encasement and invasion, common bile and pancreatic duct obstruction with proximal dilation, which were absent in the present case, are signs highly suggestive of adenocarcinoma, and (c) lymphadenopathy below the level of the left renal vein, which was present in this case, is highly suggestive of secondary pancreatic lymphoma.

Excisional biopsy of an enlarged left superficial inguinal lymph node revealed a diffuse growth pattern and large lymphocytes without follicular structures. Immunohistologic findings showed lymphocytes that were strongly positive for CD20, CD79a and Bcl-2 and negative for CD3, CD5, CD10, CD23, CD30, and Bcl-6. These results supported the diagnosis of diffuse large B cell lymphoma. EUS-FNB with 22G needle of the pancreatic head mass performed in order to allow us to complete the pathologic diagnosis. Hematoxylin and eosin staining of tissue specimens showed that tumor cells were medium sized atypical lymphocytes with diffuse proliferation and without follicular structures. Bone marrow aspiration and biopsy samples demonstrated no infiltration by lymphoma cells.

All the above clinical, imaging and pathologic results were strongly suggestive with the diagnosis of a stage IIE non-Hodgkin lymphoma with secondary pancreatic head involvement. The patient treated with eight cycles of the cyclophosphamide-vincristine-prednisolone regimen. Interval abdominal CT for response assessment after two and eight cycles demonstrated partial and complete response of the pancreatic head lesion and mesenteric and paraaortic lymph nodes according to the RECIST 1.1 criteria, respectively. Chemotherapy treatment scheme completed without short-term side effects. Follow-up at the first year including biannual abdominal CT showed no evidence of lymphoma remission.

References

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Diagnosis: *Secondary pancreatic lymphoma*