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Editorial

HCV and Pancreatic Lymphoma: Is there a Relationship?

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Editorial

Extranodal Non-Hodgkin's Lymphomas (NHL) represent up to 30-40% of all NHL cases. The gastrointestinal tract, especially the stomach and the small bowel, is the most commonly involved Extranodal site, accounting for about half cases [1]. Primary Pancreatic Lymphoma (PPL) is extremely rare, comprising 2.2% of Non-Hodgkin's Lymphomas (NHLs) and 4.9% of all pancreatic malignancies [2]. Clinical manifestations and imaging findings of PPL are similar to adenocarcinoma, but PPL must be distinguished from it because unlike pancreatic adenocarcinoma, PPL is potentially treatable [3]. Hepatitis C Virus (HCV) infection has been associated with the development of B cell NHL (including diffuse large B cell lymphoma, marginal zone lymphoma and Extranodal marginal zone B cell lymphoma of mucosa-associated lymphoid tissue) [4]. According to the currently more accepted pathogenetic model, the role of HCV infection in lymphoma genesis may be related to the chronic antigenic stimulation of B-cell immunologic response by the virus [5].

In a study by Mishra et al. [6] based on the Surveillance, Epidemiology, and End Results database, 523 cases of PPL were identified. The median age range at diagnosis was 65-69 years. The most common histologic type was diffuse large B cell lymphoma. The head of the pancreas is the most common location. Presenting symptoms are non-specific, including abdominal pain, weight loss, and vomiting. Obstructive jaundice seems to be less frequent than in pancreatic adenocarcinoma. Systemic symptoms such as fever, chills and night sweats are uncommon [7]. CT is the most common imaging method for the detection of PPL. The combination of a bulky localized tumor in the pancreatic head without significant dilatation of the main pancreatic duct strengthens a diagnosis of pancreatic lymphoma over adenocarcinoma. The presence of calcification or necrosis is a reliable finding for ruling out NHL [8]. EUS can visualize pancreatic tumor dimension and anatomic location in relation to surrounding structures. EUS-guided fine needle biopsy of tumors can also be performed and provide a histological diagnosis of PPL in some cases [9]. EUS-guided FNA (EUS-FNA) of pancreatic masses is as accurate as CT/ultrasound-guided sampling and surgical biopsies [10], and immunocytochemistry examination of the specimen can improve the accuracy of EUS-FNA cytology [11]. Criteria for the definition of PPL as used by Dawson et al. [12] include: (1) neither superficial lymphadenopathy nor enlargement of mediastinal lymph nodes on chest radiography; (2) a normal leukocyte count in peripheral blood; (3) main mass in the pancreas with lymph node involvement confined to the peripancreatic region; (4) no hepatic or splenic involvement. A causative role of HCV in B cell lymphoproliferative disorders has been suggested by several reports. Despite these associations, an association of HCV infection with pancreatic lymphoma has only been shown by few reports [13]. Visco et al. [14] in Italy analyzed 156 previously untreated consecutive HCV-positive patients with diffuse large B cell lymphoma observed from 1994 to 2004. The spleen was the most frequently involved Extranodal site, followed by liver and stomach. They observed only one case of pancreas lymphoma. The association between HCV and pancreatic lymphomas is still unknown and more research is needed to clarify the relationship between them.

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