

FDG PET-CT에서 악성림프종처럼 보이는 복부 기쿠치병

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Intra-abdominal Kikuchi's Disease Mimicking Malignant Lymphoma on FDG PET-CT

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Kikuchi's disease is a self-limiting benign disease characterized by cervical lymphadenopathy, but it can be mistaken for malignant disease, and when involved lymph nodes are unusually located, diagnosis can be more difficult. The authors report the case of a 19-year-old man with Kikuchi's disease, who had isolated intra-abdominal lymphadenopathy and increased 18-fluoro-deoxyglucose (FDG) uptake in positron emission tomography-computed tomography (PET-CT). Although its incidence is extremely rare, intra-abdominal Kikuchi's disease with increased FDG uptake in PET-CT image should be considered in the differential diagnosis when constitutional symptoms mimic those of malignant lymphoma. (Nucl Med Mol Imaging 2009;43(4):363-365)

Key Words: Abdomen, Kikuchi's disease, positron-emission tomography

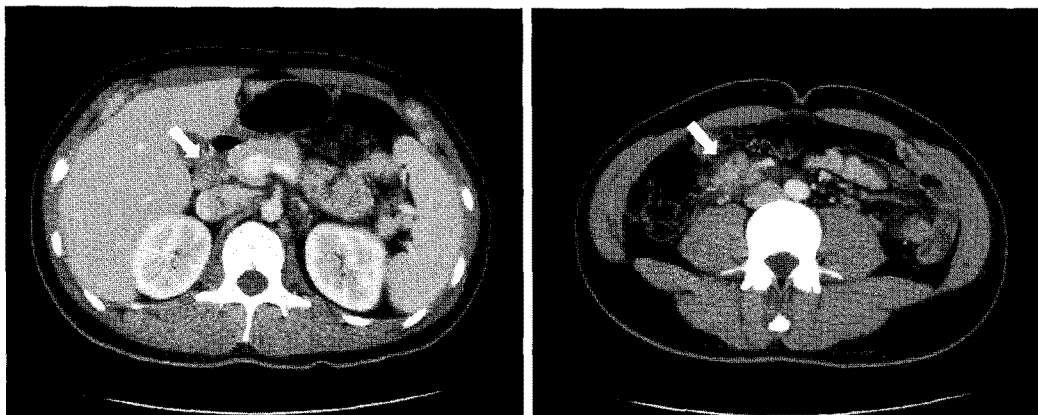


Figure 1. A 19-year-old man presented with a 2-week history of progressively worsening periumbilical abdominal pain, fever, night sweating, and weight loss (5 kg during the previous 2 weeks). A computed tomography (CT) scan of the abdomen showed multiple lymph node enlargements in the paraaortic area, porta hepatis, peripancreatic area, ileocecal area, and mild hepatosplenomegaly.

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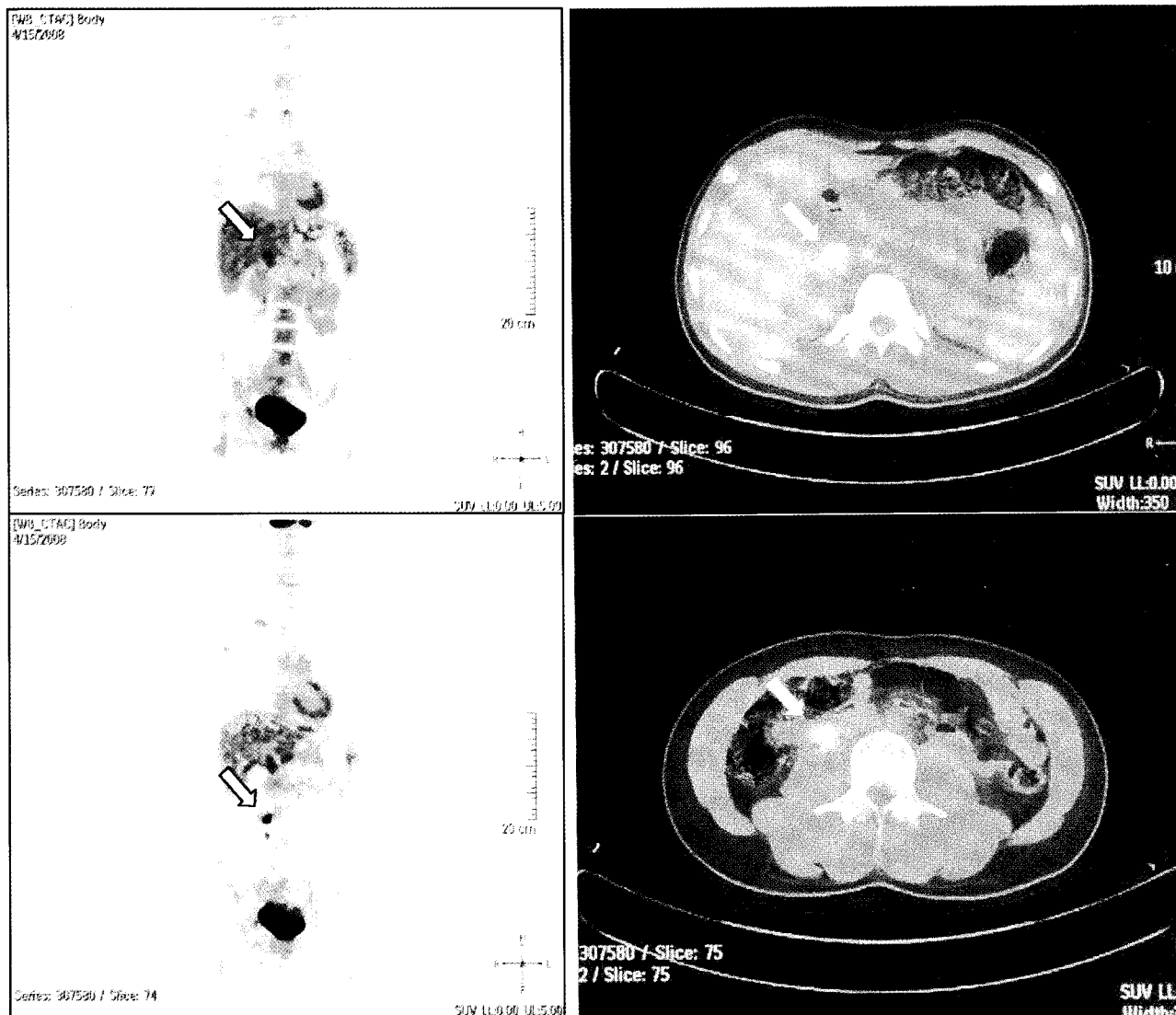


Figure 2. With the impression of malignant lymphoma, the patient underwent a positron emission tomography (PET)-CT scan, which revealed multiple lymph nodes in the ileocecal and porta hepatis areas with 18-fluoro-deoxyglucose (FDG) uptake (standardized uptake value, SUV, 5.2 and 4.7) compatible with malignant lymphadenopathy. A PET-CT scan was ordered to characterize any suspected malignancy, because PET-CT is often used for the diagnosis and staging of malignancies. Moreover, FDG uptake correlates with cellular metabolic activity and substantially increases in inflammatory and malignant cells. Few reports have been previously described PET findings in Kikuchi's disease, but those available report elevated FDG uptake in enlarged lymph nodes, as was found in the present image.¹⁻³⁾

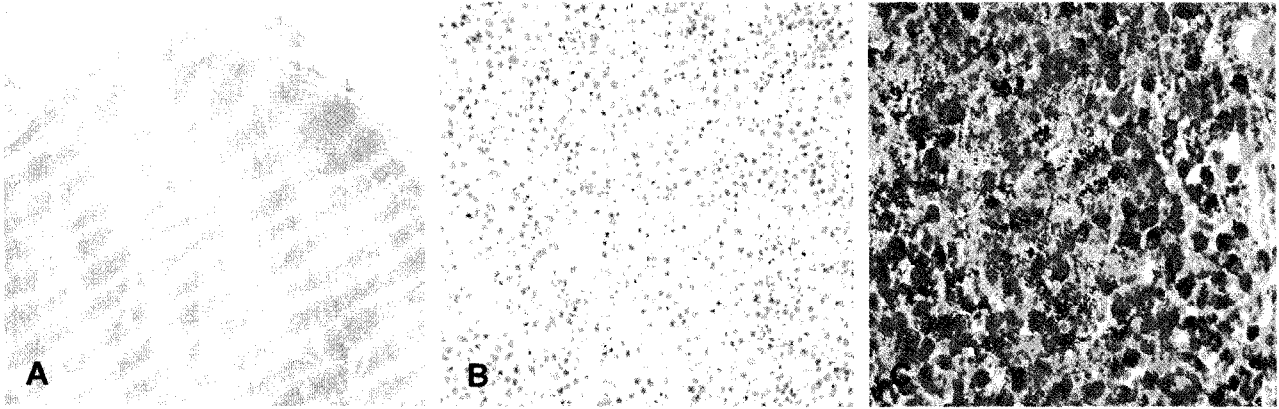


Figure 3. Exploratory laparotomy was performed and lymph nodes in the ileocecal area were biopsied. Histologic findings of the enlarged lymph node showed features typical of Kikuchi's disease. (A) Lymph node showed patchy areas of necrosis and large accumulations of histiocytes as wedge-shaped regions in the cortex. H&E X 40. (B) Fibrinoid necrosis consisted of brightly eosinophilic fibrinoid deposits, which included nuclear fragments, cellular debris, and large aggregates of histiocytes. H&E X 400. (C) Slightly stained histiocytes showed CD68 immunoreactivity. CD68 X 400.

Kikuchi's disease is a benign necrotizing lymphadenitis that primarily affects the cervical lymph nodes, and has a self-limited clinical course.^{4,5)} However, few cases presenting with intra-abdominal lymph nodes and an acute abdomen have been reported.^{4,6-10)} Notably enlarged lymph nodes were located in the mesentery of the cecum and distal ileum in all previously reported cases. Furthermore, all of these patients underwent laparotomy under the clinical impression of acute appendicitis. In the present case, there are different clinical findings concurred with the majority of reported cases, namely, fever, night sweating, and weight loss at presentation. In addition, enlarged lymph nodes were located in the porta hepatis and in the paraaortic and peripancreatic areas as well as in the ileocecal area. The unusual intra-abdominal lymph nodes enlargements in Kikuchi's disease and its constitutional symptoms resemble the symptoms of malignant lymphoma, and in the present case PET-CT imaging demonstrated the classic features of malignant lymphadenopathy. Although its occurrence is extremely rare, Kikuchi's disease with intra-abdominal lymph node involvement should be considered in the differential diagnosis of malignant lymphoma.

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