

Clinical Image

¹⁸F-FDG PET-CT in adult-onset Still's disease mimics malignant lymphoma

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A short running title; ¹⁸F-FDG PET-CT in adult-onset Still's disease

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Abstract

There are no specific serological markers or imaging techniques for Adult-onset Still's disease (AOSD) diagnosis. It is essential to rule out other diseases, especially malignant lymphoma, because both diseases sometimes show similar clinical presentations.

However, unfortunately, this case showed PET-CT findings in AOSD patients could mimic those in malignant lymphoma.

KEYWORDS

Adult-onset Still's disease, malignant lymphoma, PET-CT

Key Clinical Message

Before reaching Adult-onset Still's disease diagnosis, it is essential to rule out other diseases, especially malignant lymphoma. However, unfortunately, this case showed PET-CT findings in AOSD patients could mimic those in malignant lymphoma.

A 36-year-old Japanese woman presented with a sore throat, cervical masses, rash, and fever. Her cervical lymph nodes were enlarged and palpable without tenderness.

Laboratory examination revealed a white blood cell count of 32,300/ μ L and C-reactive protein level of 15.0 mg/dL. However, individual culture results, antinuclear antibody, and rheumatoid factors were all negative. Her soluble interleukin-2 receptor concentration was 947 U/mL. Computed tomography showed generalized lymphadenopathy and hepatosplenomegaly. Positron-emission tomography-computed tomography (PET-CT) revealed increased uptake of ^{18}F -fluorodeoxyglucose in the cervical and axillary lymph nodes and the diffuse bone marrow (Figure 1). Malignant lymphoma was suspected; however, bone marrow aspiration and a cervical lymph node biopsy reported no malignancies. She was ultimately diagnosed with adult-onset Still's disease (AOSD) based on Yamaguchi's criteria¹ and treated with prednisolone and methotrexate. Her symptoms improved, and her C-reactive protein level normalized.

Indications for PET-CT have rapidly increased in benign diseases. Some reports on AOSD showed ^{18}F -fluorodeoxyglucose accumulation in the spleen, bone marrow, lymph nodes, skin, joints, parotid glands, or serous effusions², but without set patterns. This case showed that AOSD patients could present with PET-CT findings which mimicked in malignant lymphoma.

CONFLICT OF INTEREST

The authors declare that they have no competing interests.

AUTHOR CONTRIBUTIONS

HS and HN wrote the article and made the literature review.

SS reviewed the manuscript.

All the authors read and approved the final manuscript.

INFORMED CONSENT

The authors have obtained patient consent.

ACKNOWLEDGEMENT

None.

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Figure Legend

Figure 1: Positron-emission tomography-computed tomography demonstrated an increased ^{18}F -fluorodeoxyglucose uptake among the cervical and axillary lymph nodes as well as diffuse bone marrow.