

Stoma Site Infection Mimicking Lymphoma Recurrence: Potential Pitfall on ¹⁸F FDG Positron Emission Tomography-Computed Tomography

Abstract

FDG uptake is an unreliable tool when it comes to distinguish between infectious and malignant etiology particularly in conditions involving the lymph nodes. We describe a case of a 42-year-old man who has been operated for ileal lymphoma two decades back and now developed ileostomy site infection which masqueraded as lymphoma recurrence on ¹⁸F FDG positron emission tomography-computed tomography.

Keywords: FDG, infection, lymphoma, positron emission tomography-computed tomography, stoma

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A 42-year-old man came to gastroenterology outpatient department with chief complaints of blood in stool for 7 days not associated

with any abdominal pain or fever. He had a history of ileal lymphoma, for which right hemicolectomy, anterior resection

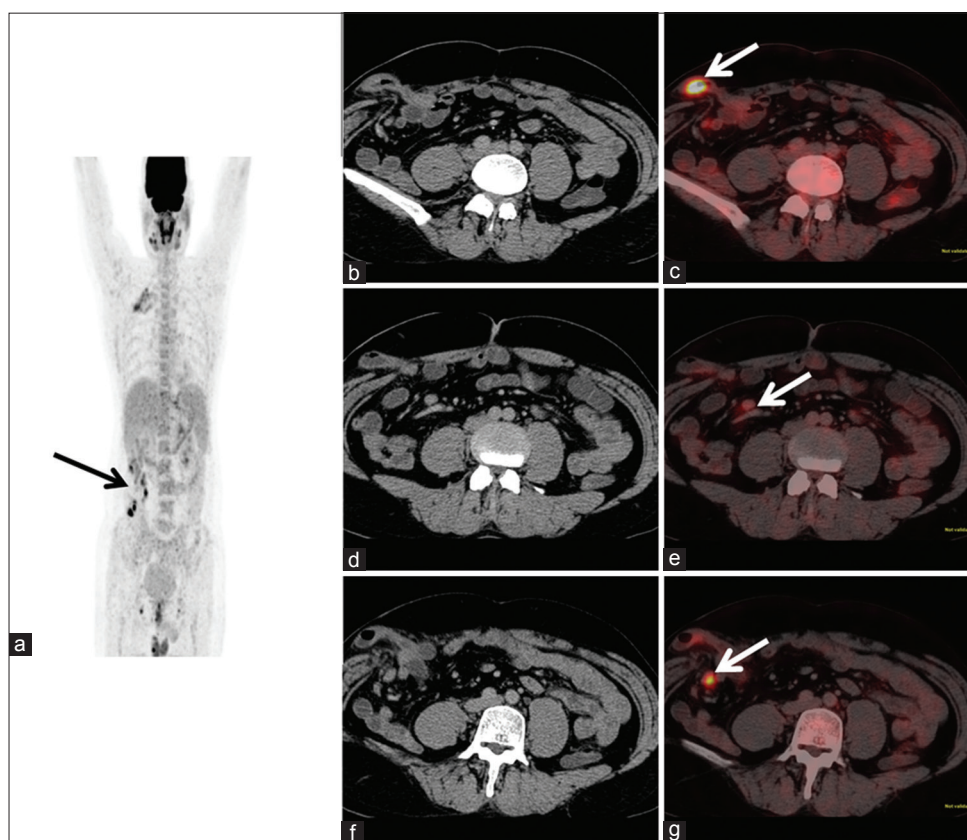


Figure 1: (a) Maximum intensity projection image of ¹⁸F FDG positron emission tomography-computed tomography showing few focal areas of FDG uptake in the right lumbar region. (b) Axial computed tomography image showing thickening in the distal herniated ileal loop showing increased FDG uptake in the fused transaxial positron emission tomography-computed tomography image (c, white arrow). (d and f) Few mesenteric lymph nodes in the para-ileal location in the axial computed tomography image which shows increased FDG uptake in the fused transaxial positron emission tomography-computed tomography (e and g)

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with ileostomy, was done two decades back. He had no gastrointestinal complaints about following 20 years. Suspecting lymphoma recurrence, he was subjected to ¹⁸F FDG positron emission tomography-computed tomography (PET-CT) scan to rule out any metabolically active disease pertaining to lymphoma. Scan findings revealed increased FDG uptake in the herniated distal ileal loops [Figure 1a-c, arrows] with few FDG avid mesenteric lymph nodes in the para-ileal location [Figure 1a solid black arrow and 1d-g, solid white arrows]. USG-guided FNAC was done from the mesenteric lymph nodes turned out to be reactive. Various infectious and granulomatous disorders such as which predominantly involve the lymph nodes are known to mimic lymphoma.^[1-6] Nuclear medicine physicians should keep infective/inflammatory etiology as the first and foremost differential while reporting ¹⁸F FDG PET-CT scans which are indicated for surveillance of completely treated lymphomatous disorders. This case scenario is particularly relevant in India and other Southeast Asian countries where the prevalence of infectious disorder is very high among the general population. This case reiterates the fact that ¹⁸F FDG PET-CT alone may be unreliable in differentiating inflammation/infection from malignancy and clinical examination and histopathological correlation are necessary for the final concrete diagnosis.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The

patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

References

1. Omri HE, Hascsi Z, Taha R, Szabados L, Sabah HE, Gamiel A, *et al.* Tubercular meningitis and lymphadenitis mimicking a relapse of Burkitt's lymphoma on (18)F-FDG-PET/CT: A case report. *Case Rep Oncol* 2015;8:226-32.
2. London J, Grados A, Fermé C, Charmillon A, Maurier F, Deau B, *et al.* Sarcoidosis occurring after lymphoma: Report of 14 patients and review of the literature. *Medicine (Baltimore)* 2014;93:e121.
3. Hou S, Shen J, Tan J. Case report: Multiple systemic disseminated tuberculosis mimicking lymphoma on 18F-FDG PET/CT. *Medicine (Baltimore)* 2017;96:e7248.
4. Valour F, Sénéchal A, Chidiac C, Ferry T. Chronic HIV-1 infection mimicking splenic malignant lymphoma on F-18 FDG-PET/CT. *BMJ Case Rep* 2012;2012. pii: bcr1120115195.
5. Ørbæk M, Graff J, Markova E, Kronborg G, Lebech AM. (18) F-FDG PET/CT findings in acute Epstein-Barr virus infection mimicking malignant lymphoma. *Diagnostics (Basel)* 2016;6. pii: E18.
6. Tripathy S, Parida GK, Roy SG, Singhal A, Mallick SR, Tripathi M, *et al.* Fluorodeoxyglucose positron emission tomography-computed tomography in disseminated cryptococcosis. *Indian J Nucl Med* 2017;32:377-9.