

Snow Leopard Appearance of Subcutaneous Panniculitis such as T-cell Lymphoma on ¹⁸F-FDG PET/CT

¹⁸F-FDG PET/CT'de T-hücreli Lenfoma Benzeri Deri Altı Pannikülitin Kar Leoparı Görünümü

🛛 Salah Nabih Oueriagli, 🗗 Laila El Asraoui, 🖨 Omar Ait Sahel, 🖨 Yassir Benameur, 🖨 Abderrahim Doudouh

Mohamed V University Souissi, Mohammed V Military Teaching Hospital, Department of Nuclear Medicine, Rabat, Morocco

Abstract

Subcutaneous panniculitis such as T-cell lymphoma (SPTCL) is a very rare disorder. Patients usually present with multiple subcutaneous nodules on the extremities without visceral disease. Dissemination to extra-cutaneous sites is unusual. Only a few cases of SPTCL have been reported in the literature describing the findings of ¹⁸F-fluorodeoxyglucose (FDG) positron emission tomography (PET). Here, we represent an interesting and unusual case of diffuse SPTCL with snow Leopard skin appearance on ¹⁸F-FDG PET/computed tomography. **Keywords:** Panniculitis-like T-cell lymphoma, snow Leopard skin, ¹⁸F-FDG PET/CT

Öz

Subkütan pannikülit benzeri T-hücreli lenfoma (SPTCL) çok nadir görülen bir hastalıktır. Hastalar genellikle ekstremitelerde visseral hastalık olmaksızın çok sayıda subkütan nodül ile başvurdular. Ekstra-kutanöz bölgelere yayılım alışılmadık bir durumdur. Literatürde, ¹⁸F-florodeoksiglukoz (FDG) pozitron emisyon tomografisi (PET) bulguları bildirilen yalnızca birkaç SPTCL olgusu bildirilmiştir. Burada, ¹⁸F-FDG PET/bilgisayarlı tomografide kar Leoparı deri görünümü olan, diffüz SPTCL'li ilginç ve alışılmadık bir olguyu sunuyoruz.

Anahtar kelimeler: Pannikülit benzeri T-hücreli lenfoma, kar Leoparı derisi, ¹⁸F-FDG PET/CT

Address for Correspondence: Prof. Salah Nabih Oueriagli MD, Mohamed V University Souissi, Mohammed V Military Teaching Hospital, Department of Nuclear Medicine, Rabat, Morocco

Phone: +212662101403 E-mail: salah.nabihoueriagli@gmail.com ORCID ID: https://orcid.org/0000-0001-7824-3158 Received: 25.11.2021 Accepted: 06.03.2022

©Copyright 2023 by Turkish Society of Nuclear Medicine

Molecular Imaging and Radionuclide Therapy published by Galenos Yayınevi.



Figure 1. A 22-year-old female patient, presented with macrophage activation syndrome in the context of diffuse subcutaneous panniculitis such as T-cell lymphoma (SPTCL), was referred to our positron emission tomography (PET) unit to evaluate initial staging. Whole-body non-contrast-enhanced ¹⁸F-fluorodeoxyglucose (FDG) PET/computed tomography (CT) was performed, and the 3D maximal intensity projection showed a snow Leopard skin appearance with multiple disseminated hot spots throughout the subcutaneous tissues (panel A). Fusion images in axial sections revealed areas of abnormal increased uptakes corresponding to diffuse subcutaneous ¹⁸F-FDG multiple micronodular (panel B). Our PET/CT also showed nodal uptakes in right inguinal lymph-nodes with maximum standard uptake value: 8.6 (panel C). SPTCL is a very rare disorder in which all patients are usually presented with multiple subcutaneous nodules on the extremities and trunk without visceral disease (1). It represents 1% of cases of non-Hodgkin's lymphoma (2). Dissemination to extra-cutaneous sites is unusual, and SPTCL may be preceded for years by a seemingly benign panniculitis (3). In our knowledge, just a few cases have been reported in the literature, describing the appearance of SPTCL on ¹⁸F-FDG PET (4). Without histology confirmation, snow Leopard skin appearance on ¹⁸F-FDG PET/CT can be related to other origins such as: benign panniculitis, sarcoidosis, and cutaneous polyarteritis nodosa (5,6).

Ethics

Informed Consent: All appropriate patient consent forms were obtained. In this form, the patient gave consent for their pictures and other clinical information to be reported in the journal.

Peer-review: Externally peer-reviewed.

Authorship Contributions

Surgical and Medical Practices: S.N.O., Concept: S.N.O., L.E.A., O.A.S., Design: S.N.O., L.E.A., O.A.S., Data Collection or Processing: S.N.O., Y.B., Analysis or Interpretation: S.N.O., Literature Search: S.N.O., Writing: S.N.O., A.D.

Conflict of Interest: No conflict of interest was declared by the authors.

Financial Disclosure: The authors declared that this study received no financial support.

References

 Willemze R, Jaffe ES, Burg G, Cerroni L, Berti E, Swerdlow SH, Ralfkiaer E, Chimenti S, Diaz-Perez JL, Duncan LM, Grange F, Harris NL, Kempf W, Kerl H, Kurrer M, Knobler R, Pimpinelli N, Sander C, Santucci M, Sterry W, Vermeer MH, Wechsler J, Whittaker S, Meijer CJ. WHO-EORTC classification for cutaneous lymphomas. Blood 2005;105:3768-3785.

- 2. Paulli M, Berti E. Cutaneous T-cell lymphomas (including rare subtypes). Current concepts. II. Haematologica 2004;89:1372-1388.
- Weenig RH, Ng CS, Perniciaro C. Subcutaneous panniculitis-like T-cell lymphoma: an elusive case presenting as lipomembranous panniculitis and a review of 72 cases in the literature. Am J Dermatopathol 2001;23:206-215.
- Kim JS, Jeong YJ, Sohn MH, Jeong HJ, Lim ST, Kim DW, Kwak JY, Yim CY. Usefulness of F-18 FDG PET/CT in subcutaneous panniculitis-like T cell lymphoma: disease extent and treatment response evaluation. Radiol Oncol 2012;46:279-283.
- Bompard F, de Menthon M, Gomez L, Gottlieb J, Saleh NS, Chekroun M, Grimon G, Goujard C, Durand E, Besson FL. 18F-FDG PET/CT of sarcoidosis with extensive cutaneous and subcutaneous nodules: the snow leopard sign. Eur J Nucl Med Mol Imaging 2019;46:1980-1981.
- Shimizu M, Inoue N, Mizuta M, Ikawa Y, Yachie A. Leopard skin appearance of cutaneous polyarteritis nodosa on 18Ffluorodeoxyglucose positron emission tomography. Rheumatology (Oxford) 2016;55:1090.