A case of granulomatous slack skin cutaneous T-cell lymphoma: PET/CT imaging findings.

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Journal Title: BJR Case Reports
Volume: Volume 1, Number 1
Publisher: (publisher) | 2015, Pages 20150052-20150052
Type of Work: Article
Publisher DOI: 10.1259/bjcr.20150052
Permanent URL: https://pid.emory.edu/ark:/25593/tjv56

Final published version: http://dx.doi.org/10.1259/bjcr.20150052

Accessed February 14, 2019 9:17 PM EST
A 24-year-old female presented with widespread skin changes on the upper and lower extremities, torso and genitalia. 2 years after the initial presentation, owing to worsening of her skin, she underwent partial vulvectomy. Lesional skin histopathology revealed the diagnosis of granulomatous slack skin cutaneous T-cell lymphoma (GSS CTCL) (Figure 1a,b). Over the course of 3 years, she received a variety of therapies. However, owing to therapy-related complications, she discontinued treatment. While off therapy, new skin lesions and lymphadenopathy developed. Our patient’s disease progression was clearly demonstrated by 18F-fludeoxyglucose (FDG) positron emission tomography (PET)/CT findings (Figures 2 and 3).

**CASE REPORT**

A 24-year-old black female presented with widespread skin changes on the upper and lower extremities, torso and genitalia. 2 years after the initial presentation, owing to worsening of her skin, she underwent partial vulvectomy. Lesional skin histopathology revealed the diagnosis of granulomatous slack skin cutaneous T-cell lymphoma (GSS CTCL) (Figure 1a,b). Over the course of 3 years, she received a variety of therapies. However, owing to therapy-related complications, she discontinued treatment. While off therapy, new skin lesions and lymphadenopathy developed. Our patient’s disease progression was clearly demonstrated by 18F-fludeoxyglucose (FDG) positron emission tomography (PET)/CT findings (Figures 2 and 3).

**DISCUSSION**

Primary CTCLs are a rare subgroup of non-Hodgkin lymphoma, with an annual age-adjusted incidence of approximately 6.4 per million persons.1 GSS is a very rare form of CTCL, approximately 50 cases of which have been reported to date.2 The role of PET/CT in assessing characteristics of CTCL has been recently studied.3,4 Although sites of cutaneous disease can be evaluated clinically, 18F-FDG PET/CT can help to direct biopsies to the most FDG-avid cutaneous disease site if large cell transformation is suspected.3 PET/CT also aids in the evaluation of extracutaneous involvement, specifically in the identification of possible nodal disease.3 Tsai et al.3 also suggested that intensity of nodal FDG activity correlated with histologic lymph node grade.

GSS has been associated with the development of secondary lymphoid neoplasms, including Hodgkin lymphoma.5 Follow-up with PET/CT can be considered in selected cases.

PET/CT imaging findings of GSS have not yet previously been reported. In this report, we present PET/CT characteristics of a patient with GSS.

**LEARNING POINTS**

1. PET/CT is useful to direct the site of biopsy in case of suspicion for large cell transformation of CTCLs.
2. PET/CT is useful to identify the sites of extracutaneous involvement of CTCLs.
3. As GSS has been associated with secondary lymphomas, PET/CT follow-up can be useful in selected cases.
REFERENCES


