Eosinophilic Fasciitis Illustrated by $[^{18}\text{F}]$ FDG-PET/CT

Ryota Kurimoto$^{1,2}$, Kei Ikeda$^1$, Daiki Nakagomi$^1$ and Hiroshi Nakajima$^1$

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A 69-year-old woman presented with a 2-month history of fatigue and progressive stiffness in her forearms without any skin manifestations. Laboratory tests showed an elevated erythrocyte sedimentation rate and hypereosinophilia. $[^{18}\text{F}]$ FDG-PET/CT revealed a diffuse and symmetrical FDG uptake in the fasciae of the upper limbs and girdles (Picture A-C). A biopsy specimen from the right deltoid muscle, in which the FDG uptake was the strongest, showed marked eosinophilic infiltration in the fascia, but not in the muscle (Picture D). She was therefore diagnosed with eosinophilic fasciitis and treated successfully with corticosteroids.

Eosinophilic fasciitis is a rare disease characterized by diffuse fasciitis, thickening of the skin and soft tissues, and eosinophilia (1). $[^{18}\text{F}]$ FDG-PET/CT makes it possible to conduct systemic screening for inflammation and it is useful to determine the optimal site to perform tissue biopsy (2). As a result, $[^{18}\text{F}]$ FDG-PET/CT can be a useful imaging tool when the possibility of a broad range of inflammatory diseases, including eosinophilic fasciitis, needs to be considered.

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$^1$Department of Allergy and Clinical immunology, Chiba University Hospital, Japan and $^2$Department of Medical Oncology, Chiba University Hospital, Japan

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Correspondence to Dr. Kei Ikeda, K.Ikeda@faculty.chiba-u.jp
References
