Comment to case report on intravascular lymphoma

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Dear Editor,

We read K. Boslooper's case report on intravascular lymphoma with great interest.¹ To our knowledge, intravascular lymphoma is rare, and may present as progressive multifocal cerebral infarction.² The diagnosis of intravascular lymphoma is difficult due to the non-specific presentation and lack of lymphadenopathy, thus leading to frequent instances of autopsy-proven diagnosis. However, in Boslooper's case, 18[F]-fluorodeoxyglucose (FDG)-PET was used as a powerful functional imaging tool to diagnosis. But some findings assessing the accuracy of FDG-PET in detecting this disease remain controversial. In several reports, FDG-PET was able to detect only two of seven pathologically confirmed lesions as positive FDG-PET findings and the number of tumour cells in pathological specimens tended to be high when FDG-PET and biopsy findings matched.3

We had a patient, a 40-year-old man, with weakness of his right limbs, impairment of his short-term memory, cognitive impairment, consciousness disturbance, seizure and fever of unknown origin (FUO). Brain magnetic resonance imaging (MRI) showed multiple cortical or subcortical lesions that were hypointense on TI-weighted images, hyperintense on T2 weight and fluid-attenuated inversion recovery (FLAIR) images, and irregular patchy areas with circular enhancement on enhanced images. Bacterial, fungal, and acid-fast bacilli cultures of the cerebrospinal fluid were negative. FDG-PET showed no abnormalities. Finally, postmortem examination revealed bilateral involvement of brain by large atypical lymphoid cells, mainly within the vasculature.

In conclusion, because appropriate treatment can improve clinical outcomes, timely and accurate diagnosis is extremely important for patients with this disease.⁴ FDG-PET could, though, detect useful information leading to accurate diagnosis and prediction of severe complications, which could not be obtained using conventional diagnostic methods.^{5,6} An important consensus on organ biopsies is mandatory for the accurate diagnosis of intravascular lymphoma.⁷ Therefore, further studies are needed to establish the role of FDG-PET in this disease.

R E F E R E N C E S

- Boslooper K, Dijkhuizen D, van der Velden AWG, et al. Intravascular lymphoma as an unusual cause of multifocal cerebral infarctions discovered on FDG -PET /CT. Neth J Med. 2010;68:261-4.
- Jitpratoom P, Yuckpan P, Sitthinamsuwan P, et al. Progressive multifocal cerebral infarction from intravascular large B cell lymphoma presenting in a man: a case report. J Med Case Reports. 2011;20:24.
- Shimada K, Kosugi H, Shimada S, et al. Evaluation of organ involvement in intravascular large B-cell lymphoma by 18F-fluorodeoxyglucose positron emission tomography. Int J Hematol. 2008;88:149-53.
- Shimada K, Matsue K, Yamamoto K, et al. Retrospective analysis of intravascular large B-cell lymphoma treated with rituximab-containing chemotherapy as reported by the IVL study group in Japan. J Clin Oncol. 2008;26:3189-95.
- Kitanaka A, Kubota Y, Imataki O, et al. Intravascular large B-cell lymphoma with FDG accumulation in the lung lacking CT/(67)gallium scintigraphy abnormality. Hematol Oncol. 2009;27:46-9.
- 6. Wu SJ, Chou WC, Ko BS, et al. Severe pulmonary complications after initial treatment with rituximab for the Asian-variant of intravascular lymphoma. Haematologica. 2007;92:141-2.
- Ponzoni M, Ferreri AJM, Campo E, et al. Definition, diagnosis, and management of intravascular large B-cell lymphoma: proposals and perspectives from an international consensus meeting. J Clin Oncol. 2007;25;3168-73.

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