

IMAGING

Response in follicular lymphoma can be assessed using PET

A new prospective study has shown for the first time that ^{18}F -fluorodeoxyglucose (FDG)-PET can be used as a prognostic tool in patients with follicular lymphoma being treated with immunochemotherapy in the first line.

The more than 120 patients enrolled were treated with six cycles of R-CHOP (rituximab, cyclophosphamide, doxorubicin, vincristine and prednisone) plus two cycles of rituximab without rituximab maintenance. Patients underwent FDG-PET imaging before, after four cycles and at the end of treatment.

Complete data sets were obtained for 111 patients, with 78% of patients having negative PET scans at the end of treatment (Figure, top). For these

patients, the 2-year progression free survival (PFS) was 87%, which compares favourably to the PFS in PET-positive patients (Figure, bottom), which was 51% ($P < 0.001$). The 2-year overall survival rates were also better for the PET-negative patients than for the PET-positive, further highlighting the prognostic potential of the imaging technique.

“We also defined set criteria for best reporting, taking into account the high level of residual FDG uptake after induction,” investigator Michel Meignan explained. These criteria incorporate the Deauville 5-point scale for PET interpretation. Indeed, response evaluation with PET out-performed the current international working criteria (IWC), which is largely based on CT parameters.

These results are encouraging for patients with this incurable non-Hodgkin lymphoma. “We believe now is the time to incorporate PET in the IWC and start studies examining response-adapted therapies,” concluded Meignan.

Mina Razzak

Original article Dupuis, J. *et al.* Impact of [^{18}F] fluorodeoxyglucose positron emission tomography response evaluation in patients with high-tumor burden follicular lymphoma treated with immunochemotherapy: a prospective study from the Groupe d'Etudes des Lymphomes de l'Adulte and GOELAMS. *J. Clin. Oncol.* doi:10.1200/JCO.2012.43.0934

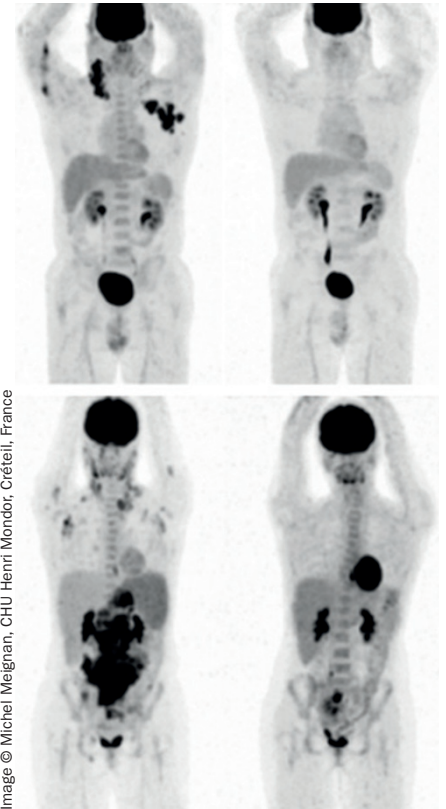


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