Prognostic impact of meningeal dissemination in primary CNS lymphoma (PCNSL): experience from the G-PCNSL-SG1 trial


BACKGROUND
We evaluated the frequency and prognostic impact of meningeal dissemination (MD) in immunocompetent adult patients with primary central nervous system lymphoma treated in a randomized phase III trial.

PATIENTS AND METHODS
MD was evaluated at study entry and defined by lymphoma proof in the meningeal compartment detected by at least one of the following methods: cerebrospinal fluid (CSF) cytomorphology, detection of clonal B cells by IgH PCR in CSF or contrast enhancement of the leptomeninges on magnetic resonance imaging (MRI).

RESULTS
Data on MD were available in 415 patients, of those, MD was detected in 65 (15.7%): in 44/361 (12.2%) by CSF cytomorphology, in 16/152 (10.5%) by PCR and in 17/415 (4.1%) by MRI. Major patients’ characteristics and therapy did not significantly differ between patients with MD (MD+) versus those without MD (MD-). There was a significant correlation of MD with CSF pleocytosis (>5/μl; P < 0.0001), but no correlation with CSF protein elevation (>45 mg/dl). Median progression-free survival was 6.7 months [95% confidence interval (CI) 0-14.5] in MD+ and 8.3 months (5.7-10.8) in MD- patients (P = 0.95); median overall survival was 21.5 months (95% CI 16.8-26.1) and 24.9 months (17.5-32.3), respectively (P = 0.98).

CONCLUSION
MD was detected infrequently and had no impact on outcome in this trial.