ORIGINAL ARTICLE

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Lung hilar Ga-67 uptake in patients with lymphoma following chemotherapy

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Scintigraphic characteristics of lung hilar Ga-67 uptake (HU) and their relationship with the etiology (benign vs. malignant) of the hilar lesions in lymphoma patients following chemotherapy were retrospectively investigated. A total of 161 lymphoma patients were included in the study. The presence/absence of HU and if present, symmetry/asymmetry and intensity of HU (on the basis of a 3 scale grading system) were visually and semiquantitatively assessed on transaxial sections of thorax Ga-67 SPECT. By drawing ROIs over right and left hilum, asymmetry index (AI%) was also calculated. HU was categorized as benign or malignant depending on the radiological correlation and clinical follow-up. In the malignant group, the majority of patients (85.7%) had grade 2 or grade 3 uptake and all had asymmetric pattern. However, in the benign group, grade 1 uptake was more common (66%) and was mainly symmetric (94.6%) in appearance. AI% in the malignant group (73.7 ± 36.6) was significantly higher than in the benign group (5.7 ± 4.9) confirming the marked asymmetry in malignant patients.

Key words: Ga-67 scan, hilar uptake, lymphoma, scintigraphy, asymmetry index