ORIGINAL ARTICLE

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Usefulness of indium-111-oxine-labeled leukocyte scintigraphy in diagnosis of inflammation associated with chronic aortic dissection

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Background: Patients with chronic aortic dissection require monitoring for indications of disease progression. In present study, inflammation adjacent to associated aortic wall was evaluated by indium-111-oxine-labeled leukocyte scintigraphy, scince inflammation of the blood vessel wall often associates with progression of chronic aortic dissection. ***Methods and Results:*** Fifteen patients with aortic dissection underwent indium-111-oxine-labeled leukocyte scintigraphy. Seven showed positive images at sites corresponding to the actual sites of the dissociated aorta. Four patients with positive images underwent surgery. Histologic examination revealed inflammatory and necrotic changes of the aortic wall. During a mean follow-up period of 2.3 years, progression of aortic dissection was observed in two of the seven patients with positive intimal imaging. ***Conclusion:*** Indium-111-oxine-labeled leukocyte scintigraphy may be a useful noninvasive technique to assess the persistent inflammation in patients with chronic aortic dissection.

Key words: aortic dissection, inflammation, leukocyte scintigraphy