Thallium-201 myocardial SPECT in a patient with mirror-image dextrocardia and left bundle branch block

Bülent Turgut,* Mehmet T. Kitapci,** N. Hakan Temiz,** Mustafa Ünlu** and Taner Erselcan*

*Department of Nuclear Medicine, Cumhuriyet University, School of Medicine, Sivas, Turkey **Department of Nuclear Medicine, Gazi University, School of Medicine, Ankara, Turkey

A 53-year-old male patient with a previous diagnosis of situs inversus with mirror-image dextrocardia underwent thallium-201 (Tl-201) stress-redistribution myocardial perfusion single photon emission computed tomography (SPECT). Electrocardiogram (ECG) obtained on right hemithorax revealed constant complete left bundle branch block. Tl-201 stress-redistribution SPECT images revealed abnormal perfusion with reversible ischemia in the anteroseptal, septal and inferoseptal walls. Coronary angiography performed 1 month after SPECT study was normal. This case illustrates that false positive reversible perfusion defects can be seen in patients with mirror-image dextrocardia associated with constant complete left bundle branch block. To our knowledge, this is the first reported case of mirror-image dextrocardia and constant complete left bundle branch block with false positive Tl-201 SPECT findings.

Key words: thallium-201, myocardial SPECT, mirror image dextrocardia, left bundle branch block