Left ventricular non-compaction (LVNC) is a rare congenital cardiomyopathy characterized by a "spongy" feature of the myocardium. A thin, com- pacted epicardial layer under an extensive non- compacted endocardial layer can be noticed with the common cardiac image techniques. Prominent trabeculation and deep recesses that communicate with the left ventricular cavity can be visible too. The "spongy" morphologic feature is not charac- teristic only of the left ventricle but can also involve the right ventricle.