Diabetes mellitus (DM) is one of the fastest growing diseases worldwide, with prevalence reaching global pandemic proportions in recent decades. The significant increase in diabetes increases morbidity and mortality from cardiovascular complications, with heart failure (HF) being the most prominent one. In patients with DM, the presence of HF leads to a greater severity of clinical symptoms, increased hospitalization rates, poorer quality of life and poorer prognosis. HF with preserved ejection fraction is more common in type 2 DM, and its diagnosis is not an easy task. Special attention is paid to left ventricular diastolic dysfunction, which is an important prognostic factor of HF in the group of type 2 DM patients. This review article is devoted to the problem of interrelation and diagnosis of HF in patients with type 2 diabetes mellitus.