Prognostic value of the QRS duration in patients with heart failure: a subgroup analysis from 24 centers of Val-HeFT.

BACKGROUND: This study investigated whether QRS duration (QRS D) is a prognostic indicator in patients with heart failure (New York Heart Association [NYHA] classes II-IV). METHODS AND RESULTS: This subgroup analysis included 248 patients with heart failure recruited in the German centers of the Valsartan Heart Failure Trial (Val-HeFT). Mean age was 60 years, mean NYHA class was 2.3, and mean left ventricular ejection fraction (EF) was 27.9%. Electrocardiograms were recorded and analyzed at the beginning of the study, at 2 weeks, 4 months, 1 year, and 2 years. The mean observation period for mortality was 25 months. Patients > or = 65 years and patients with an EF or = 160 ms (P = .0085). Multivariate analysis showed that QRS D was the only independent risk factor for all-cause mortality (P = .008). NYHA class, EF, atrial fibrillation, age, and gender failed to qualify as independent prognostic factors. CONCLUSION: QRS duration in the surface electrocardiogram is an easily obtainable parameter with a significant prognostic impact in patients with congestive heart failure and a reduced EF. In this German subgroup of Val-HeFT patients, it was an independent predictor of all-cause mortality.