Objective: The aim of the present study was to assess characteristics of ventricular tachycardia (VT) of electrical storm (ES) in ICD patients with structural heart disease. Methods: We included 156 consecutive patients who implanted ICD due to secondary prevention. ES was defined as the occurrence of at least 3 episodes of VT/VF within 24-hours. Basic treatment for ES was as follows: sedation, β-blockers, and class I and/or III antiarrhythmic drugs. We defined that elimination of ES for 2 weeks after basic treatment was drug effective (DE), if not, drug refractory (DR). Results: During a mean follow-up period of 54 ± 37 months, ES occurred in 42 patients (OMI in 12, DCM in 15, HCM in 6, ARVC in 5, cardiac sarcoidosis in 4). Patients with DE and DR were 30 and 12 patients, respectively. There were no significant differences in age, sex, and LVEF. However, cycle length of VT (VTCL) was significantly longer in patients with DR than with DE (384 ± 16 vs. 305 ± 10 ms, p<0.05). All 12 patients with DE required for catheter ablation. Conclusion: Longer VTCL in ES was related to drug refractoriness, which might be caused by stability of reentry circuit in spite of antiarrhythmic therapy. Keywords: ICD, electrical storm, ventricular tachycardia