



Figure e-1.

Serial recordings (Patient 22, p.Ala337Thr) suggest a dose-related beneficial effect of ezogabine treatment on the interictal EEG pattern.

(A, B) Early neonatal study at 6 days, obtained after phenobarbital 20 mg/kg, showed a suppression burst pattern (A) that was variable, due to state changes with longer bursts and shorter interburst intervals and (B) rare periods of continuous high-amplitude (50-200 μ V) delta activity with multifocal epileptiform discharges. Neonatal montage, sensitivity 7 μ V/mm, TC 0.3s.

(C) At age 4 months (data not shown) and at 5 months (shown here), prior to ezogabine treatment, the recording consisted of either hypsarhythmia or modified hypsarhythmia (C) with 100-300 μ V diffuse slow with fair organization and multifocal spike-wave (left>right). Longitudinal bipolar montage, sensitivity 10 μ V/mm, TC 0.1s.

(D) At 6 months, on 23 mg/kg/day ezogabine, there is good organization, mild slowing, posterior fast activity and intermittent independent temporal epileptiform discharges. Sensitivity 7 μ V/mm, TC 0.1s.

(E) At 7 months, on 14 mg/kg/day of ezogabine, a lower dose, there is fair organization, intermittent bifrontal slowing, bilateral posterior beta activity, independent temporal slowing and left more than right temporal spike wave seizures with beta activity at the onset (arrow in E). Sensitivity 7 μ V/mm, TC 0.1s.