

Table 1. Characteristics of PSCs (frequency, amplitude, rise time, decay time constant) recorded from pyramidal neurons in non-seizure controls and hippocampal samples obtained from patients with MTLE-HS.

Parameters	Non-seizure Control (n=8)	MTLE-HS (n=9)
Spontaneous EPSCs		
Frequency (Hz)	0.68 ± 0.01	0.98 ± 0.04***
Amplitude (pA)	12.05 ± 0.16	15.07 ± 0.38**
Rise time (ms)	1.9 ± 0.7	2.0 ± 0.6
Decay time constant (τ_d , ms)	9.6 ± 1.4	9.4 ± 0.9
Spontaneous IPSCs		
Frequency (Hz)	1.76 ± 0.04	1.73 ± 0.05
Amplitude (pA)	22.86 ± 0.41	21.24 ± 0.48
Rise time (ms)	2.9 ± 0.7	2.8 ± 0.4
Decay time constant (τ_d , ms)	32.4 ± 3.8	33.1 ± 1.5
Spontaneous EPSCs after incubation with 200μM kynurenine (KYN)		
	Non-seizure Control (n=6)	Control 200 μ M KYN (n=6)
Frequency (Hz)	0.67 ± 0.02	0.33 ± 0.01***
Amplitude (pA)	12.53 ± 0.23	7.86 ± 0.20***
Rise time (ms)	2.0 ± 0.3	2.1 ± 0.5
Decay time constant (τ_d , ms)	9.3 ± 1.2	9.4 ± 1.8
	MTLE-HS (n=16)	MTLE-HS 200 μ M KYN (n=6)
Frequency (Hz)	1.00 ± 0.07	0.97 ± 0.13
Amplitude (pA)	15.39 ± 0.20	14.99 ± 0.22
Rise time (ms)	2.2 ± 0.3	2.3 ± 0.9
Decay time constant (τ_d , ms)	9.0 ± 1.1	9.1 ± 1.8
Spontaneous EPSCs after perfusion with 10μM kynurenic acid (KYNA)		
	Non-seizure Control (n=6)	Control 10 μ M KYNA (n=6)
Frequency (Hz)	0.65 ± 0.05	0.54 ± 0.02***
Amplitude (pA)	12.51 ± 0.26	10.23 ± 0.24***
Rise time (ms)	1.9 ± 0.7	1.9 ± 0.4
Decay time constant (τ_d , ms)	9.7 ± 1.4	9.5 ± 2.0
	MTLE-HS (n=10)	MTLE-HS 10 μ M KYNA (n=10)
Frequency (Hz)	1.06 ± 0.09	0.73 ± 0.02***
Amplitude (pA)	16.29 ± 0.30	12.06 ± 0.29***
Rise time (ms)	2.0 ± 0.6	2.3 ± 0.7
Decay time constant (τ_d , ms)	9.6 ± 0.8	9.4 ± 0.9

Data are presented as a mean ± SEM. **P<0.01, ***P<0.001.