

# INJURIES IN PHARMACORESISTANT EPILEPSY: A COMPARISON OF TEMPORAL AND EXTRATEMPORAL EPILEPSY PATIENTS



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## Purpose

To investigate and compare injury rates, associated risk factors, and medical record documentation in patients with pharmacoresistant temporal lobe epilepsy (TLE) and extratemporal lobe epilepsy (ETLE).

## Background

The increased risk for injuries among people with epilepsy is well documented. Little work has been done to analyze the possible differences in injury rates between patients with different forms of localization related epilepsy. We sought to investigate and compare the rates of injuries in patients with medically intractable TLE and ETLE. Given that some studies assessing injuries in epilepsy make use of documentation in the medical charts as their primary form of data collection, we also investigated the rate of epilepsy-related injuries recorded in patients' medical charts.

## Methods

A total of 52 adults with treatment-resistant epilepsy, 28 with TLE and 24 with ETLE, were enrolled. All subjects had their seizures classified with prior video-EEG monitoring and were followed in a tertiary center in northwest New York City. All participants received a semi-structured phone interview regarding injuries experienced since being diagnosed with epilepsy.

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## Results

Mean duration of epilepsy was 23 years for the TLE group and 17 years for the ETLE group.

Injuries were reported in 16 (57%) of the patients with TLE and 4 (17%) of the patients with ETLE ( $p < 0.003$ ); 83% of all injuries were thought to be seizure-related. Most injuries (22/41; 54%) were classified as moderate or greater in severity. Additionally, one motor vehicle accident (MVA) was reported in the TLE group and one episode of sudden unexplained death (SUDEP) was reported in the ETLE group. More than half (55%) of the injuries were not documented in medical charts.

	TLE (n = 28)			ETLE (n = 24)		
		Thought to be seizure-related	Documented in medical chart		Thought to be seizure-related	Documented in medical chart
Head injury	3	3 (100%)	1 (33%)	5	4 (80%)	4 (80%)
Burn injury	5	3 (60%)	3 (60%)	1	0	0
Contusion	6	5 (83%)	0	4	3 (75%)	1 (25%)
Laceration	3	2 (66%)	1 (33%)	1	1 (100%)	1 (100%)
Dental injury	2	2 (100%)	0	1	1 (100%)	0
Joint dislocation	8	8 (100%)	7 (88%)	0	-	-
Fracture	2	2 (100%)	0	0	-	-
Internal injury	1	1 (100%)	1 (100%)	0	-	-
Total	30	26 (84%)	13 (43%)	12	9 (75%)	6 (50%)
MVA	1	0	0	0	-	-
SUDEP	0	-	-	1	0	0

Number of injuries experienced, their relation to seizures, and their documentation

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## Conclusion

A majority of patients with TLE report a significant prior injury. Patients with pharmacoresistant TLE may be at a higher risk to experience an injury than patients with pharmacoresistant ETLE. A substantial number of injuries are not reported, even in a tertiary care setting.



Peri-renal hematoma (arrow) secondary to a fall during a seizure

## References

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