RUNNING TITLE: Rapid-EEG at a Community Hospital

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Supplementary material

Clinical vignettes of patients transferred exclusively for EEG monitoring

Patient 1: A 69-year-old female with extensive medical comorbidities, including post-stroke

epilepsy, presented with altered mental status and shaking concerning for convulsive status

epilepticus and was found to have a small intracerebral hemorrhage. Rapid-EEG showed diffuse

slow activity and generalized periodic discharges with triphasic morphology. Subsequent EEG

monitoring at the flagship hospital did not reveal seizure activity, so the patient was transferred

back to the community hospital.

Patient 2: A 61-year-old male with medically and surgically refractory epilepsy whose primary

epilepsy care was based at the flagship academic hospital presented to the community hospital

affiliate with generalized convulsive status epilepticus. After the patient's convulsions ceased with

initial benzodiazepine treatment, Rapid-EEG was set up and immediately detected persistent non-

convulsive status epilepticus. Anti-seizure therapies were escalated appropriately, intubation was

avoided, and Rapid-EEG was used to confirm non-convulsive seizure cessation prior to transfer.

During the study period, two patients were transferred for services other than EEG monitoring.

The first patient, an 82-year-old man with a history of an intracerebral tumor, who presented with

altered mental status without distinct clinical events, was transferred for neurosurgical biopsy of

the brain mass after Rapid-EEG ruled out non-convulsive seizures. The second patient, an eight-

year-old boy with developmental delay who presented with clinical episodes concerning for

Epileptic Disorders

seizure, was transferred for pediatric neurology services after Rapid-EEG showed only diffuse slow activity.

