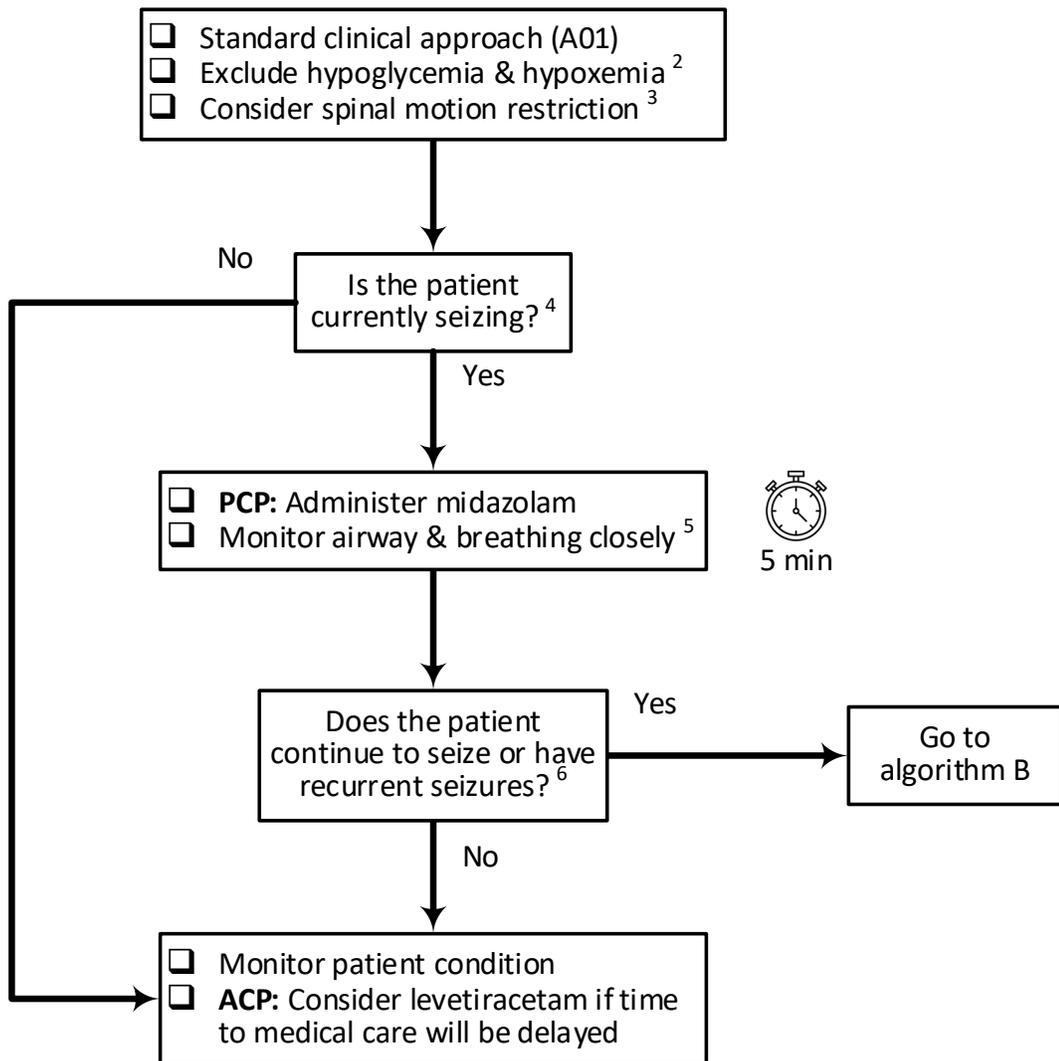
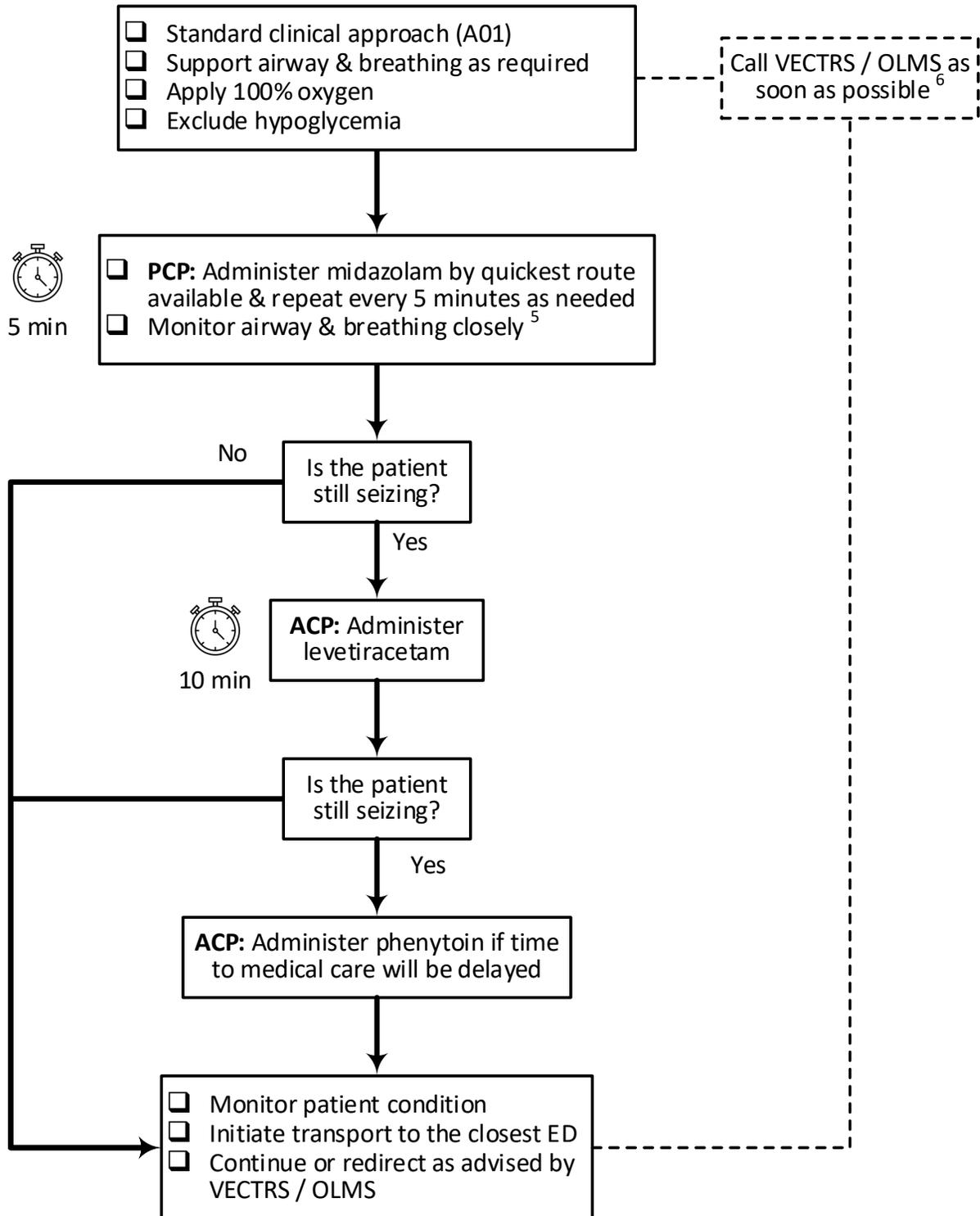


	E14 - SEIZURE & STATUS EPILEPTICUS (ALL AGES)		
	Version date: 2025-04-17	Effective date: 2025-04-30 (07:00)	
PCP = PCP - ACP	ICP = ICP & ACP	ACP = ACP only	None = EMR - ACP

ALGORITHM A: UNCOMPLICATED SEIZURE



VECTRS / OLMS: (204) 949-4000

ALGORITHM B: STATUS EPILEPTICUS

VECTRS / OLMS: (204) 949-4000

INDICATIONS

- A patient with one or more seizures

WARNINGS

- None

NOTES

1. There are numerous causes of seizures (appendix A) and the clinical presentation can be highly variable depending on the location within the brain and the amount of cortex involved.
2. Causes such as hyperglycemia or hypoxemia should be quickly corrected to prevent permanent neurological damage.
3. Patients can sometimes injure themselves during a seizure and it may be difficult to exclude a spinal injury if the patient has a decreased level of consciousness or altered mentation.
4. Most uncomplicated seizures remit spontaneously within a few minutes, and rapid prehospital administration of anticonvulsant medication is not necessary if the episode is short-lived and unlikely to recur.

However, if the patient is still seizing on EMS arrival or if the episode has lasted longer than 5 minutes, first-line therapy with a benzodiazepine should be initiated (algorithm A).

5. During a seizure the patient will be apneic, resulting in oxygen desaturation and hypercapnia. In the postictal period, ineffective ventilation and / or airway compromise can cause profound respiratory failure, especially if sedative medications have been administered.
6. Status epilepticus is defined as an unremitting seizure lasting longer than 5 minutes, or multiple consecutive seizures without a return to baseline neurological function in between episodes. It is a life-threatening neurological emergency and the options for prehospital management can be limited.

Paramedics should keep a low threshold to call the Virtual Emergency Care & Transport Resource Service (VECTRS) and consult on line medical support (OLMS) for management advice and destination decision support.

7. All efforts should be made to terminate status as soon as possible, starting with midazolam. By ten minutes of continuous seizure activity, second-line therapy should be initiated (algorithm B).

LINKS

- A01 - Standard clinical Approach
- B01 - Standard Destination & Redirection
- F04 - Spinal Motion Restriction
- M07.1 - Midazolam
- M29 - Levetiracetam
- M35 - Phenytoin

APPROVED BY	
	
EMS Medical Director	EMS Associate Medical Director

VERSION CHANGES (refer to X05 for change tracking)
<ul style="list-style-type: none"> Retitled (from SEIZURES) Addition of advanced work scope Flow chart divided and revised Addition of information for status epilepticus Addition of list of causes and definitions

APPENDIX A: CAUSES OF SEIZURES
<p>ACTIVE SYSTEMIC INSULT:</p> <ul style="list-style-type: none"> Hypoglycemia or hyperglycemia Hypoxemia Alcohol & drug withdrawal Drug intoxication Hyponatremia or hypernatremia Hypocalcemia Hypomagnesemia Uremia (end-stage renal failure) Hyperthyroidism Fever / hyperthermia <p>ACUTE / RECENT BRAIN INSULT:</p> <ul style="list-style-type: none"> CNS infection (encephalitis, meningitis) Acute stroke Acute head injury Intracranial surgery