**Title:** Don’t Stick with the STATUS Quo: Management of Super Refractory Status Epilepticus

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**Learning Objectives:**

1. Define status epilepticus types and initial management strategies
2. Discuss literature regarding treatment strategies in super refractory status epilepticus (SRSE)
3. Recognize important patient factors affecting SRSE management

**Abstract**

Super refractory status epilepticus (SRSE) is a rare disease state affecting only about 10% of all patients who develop status epilepticus. However, SRSE carries a high mortality rate ranging between 30-50% of affected patients. Seizure control is essential to prevent long-term neurological damage and functional deficits. Societal guidelines provide robust recommendations for initial management strategies of SE up to 40 minutes of seizure duration. However, after the addition of an anesthetic agent, guidance for treatment wanes. Therefore, controversy exists regarding the management of patients who continue to seize despite these recommended initial therapies. Available literature has largely focused on antiseizure and anesthetic medications to provide seizure control in these SRSE patients. This presentation will outline the efficacy, safety and patient-specific advantages and disadvantages for the use of propofol, midazolam, ketamine, and pentobarbital in SRSE patients.

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**Audience Response Questions**

1. CL is a 25 yo F with witnessed generalized convulsive seizure. She received 4mg lorazepam IV x1, a loading dose of levetiracetam, and an anesthetic agent is started. It has been 24h and CL continues to seize. What stage of SE is she in?
   1. Status epilepticus
   2. Refractory SE
   3. Super refractory SE
   4. Super duper refractory SE
2. MT has been diagnosed with SRSE. Propofol has been started and the attending physician asks you when MT is at higher risk of developing PRIS. How do you respond?
   1. After 24 hours of starting propofol
   2. After 48 hours of starting propofol
   3. After 72 hours of starting propofol
   4. No time is associated with PRIS development
3. SG was diagnosed with SRSE 9 days ago. She weighs 70 kg. Her ICU course has been complex, and she remains on epinephrine 21 mcg/min and norepinephrine 63 mcg/min. The resident recommends starting pentobarbital with an aggressive loading dose of 14 mg/kg. How do you respond?
   1. Agree, SG needs control of her SRSE
   2. Agree, pentobarbital has limited effect on hemodynamics
   3. Disagree, pentobarbital is not recommended in non-obese patients
   4. Disagree, pentobarbital could cause hemodynamic compromise