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# Cryptogenic new-onset refractory status epilepticus (NORSE) following blood transfusion in a patient with severe anemia\*

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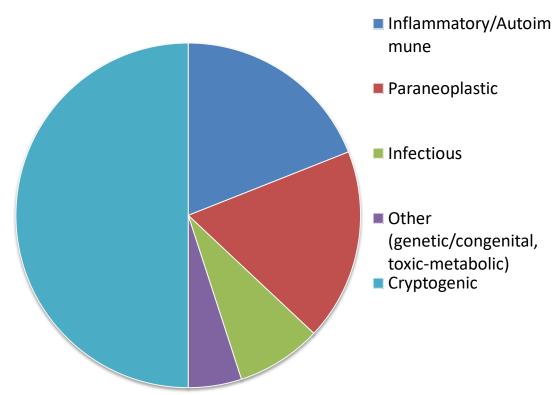
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## New-onset refractory status epilepticus (NORSE)

#### Key points:

- NORSE is a clinical condition
- No prior epilepsy diagnosis or preexisting neurological condition
- No clear structural or toxic-metabolic trigger
- 50% cases eventually have an identifiable cause
- 50% cases remain cryptogenic



No cases of NORSE have previously been described following blood transfusion.



### Refractory Seizures following blood transfusion

### **Potential Mechanisms:**

- Reversal of vasodilation resulting in endothelial damage, vasogenic edema, cortical irritation with corresponding MRI changes
  - Similar injury mechanism is described in cases of PRES, RCVS following transfusion
- Citrate-induced hypocalcemia (not present in this case)
- RBC storage lesions leading to paradoxical worsening of oxygen delivery

