Generalized Tonic Clonic Seizure

**Epidemiology**
- Most Common Generalized Seizure
- 1st Seizure: ~70% Never Seize Again
- 2nd Seizure: ~70% Will Seize Again

**Causes**
- Similar To AMS: MIST + Genetics
- Metabolic
  - ↓ Glucose
  - ↓ Sodium
- Uremia
- Hepatic Encephalopathy
- Infection
- Encephalitis, Abscess, Septic Emboli
- Structural
- Vascular: Stroke, Cerebral Vein Thrombosis
- Non-Vascular: Mass
- Toxin
- EtOH, BZD Withdrawal
- ↓ Seizure Threshold (e.g., Bupropion)

**Genetics:** 
- >30 Different Genes

**Clinical Manifestations**
- **Prodrome:** Consistent for the Patient
  - Specific Aura (Dizziness, Déjà Vu, etc.)
  - Some Have No Warning
- **Seizure:**
  - Abrupt Onset, Most Last Minutes
  - Loss of Consciousness
  - Muscle Stiffening (Tonic), Jerking (Clonic)
  - Incontinence, Tongue Biting
- **Post-Ictal State:**
  - Confusion, Disorientation, Agitation
  - Can Last Hours

**Exam Labs + Imaging**
- Focus on Focal Finding Neuro Deficits
- Lactic Acidosis (Rapid Rise + Fall), Elevated CK
- MRI >> CT Unless Bleed Suspected
- LP If CNS Inflammation Suspected

**DDx**
- Syncope
- Migraine
- Hypoglycemia
- Psychogenic Non-Epileptic Seizure

**Management**
- Emergent? Rx > Dx
- ABCs, Glucose
- Prep BZD
- >2 min
- BZD x 3
- Phenytoin/Other

**Dx**
- Provoking Factor?
  - MIST
  - MRI
  - Inpatient EEG
  - Outpatient EEG
- Long-Term Rx
  - Recurrence Risk
  - Rx Anti-Epileptic
  - Ø Anti-Epileptic