Related to refractory/super-refractory status epilepticus	Related to drug treatment	Related to prolonged intensive care
Respiratory		
Apnea		
Acute apnea after a prolonged seizure without antecedent abnormal breathing pattern should alert for a rapidly evolving posterior fossa lesion	Respiratory depression	Pulmonary embolism Recurrent mucus plugs Pleural effusions Atelectasis Ventilator-associated pneumonia
<ul> <li>Abnormal breathing patterns</li> <li>May cause ineffective ventilation to the point of respiratory acidosis</li> <li>Cheyne Stokes breathing: waxing waning hyperpnoea, regularly alternating with shorter period of apnea; may be seen in large supra-tentorial lesion(s), deep seated cerebral or diencephalic lesions e.g. subdural hematomas, infarcts, or meningitis, and certain metabolic disturbances. Important to rule out co-existent pulmonary disease.</li> <li>Central neurogenic hyperventilation: suggests a lesion in lower mid-brain end/example.</li> </ul>		
and/or upper pons; important to differentiate from hyperventilation due to medical reasons e.g. Kussmaul's breathing of metabolic acidosis. Apneustic breathing: usually seen with low pontine lesions e.g. basilar artery occlusion. Chaotic irregularly interrupted breathing rhythm: each breath varying in		
depth and rate, may suggest a lesion of dorso-medial part of medulla.		
Aspiration Airway compromise Secretions Hypotonia of tongue or oropharynx Non-cardiogenic pulmonary edema		
Hemodynamic		
Cardiac arrhythmias Cardiac failure Shock	Hypotension Cardiac arrhythmias Cardiac failure	
Left ventricular stunning		
Ausculoskeletal		
Ayoglobinuria May cause oliguria or acute tubular necrosis Consider urinary alkalization if myoglobinuria is detected or serum creatine kinase is >10 times upper limit of normal	Rhabadomyolysis	Contractures
Iyperkalemia		
foint dislocations: particularly posterior dislocation of shoulder joint Fractures: long bones, vertebral compre-ssion fractures Fongue bites		
Electrolyte abnormalities	Lactic acidosis	
Hypoglycemia Hyponatremia Metabolic acidosis	Hyperosmolality Metabolic acidosis Hyperkalemia Diabetes insipidus	
Acute neurological		~
Cerebral edema Central hyperthermia	Sedation Dependence/withdrawal	Critical illness myopathy Critical illness neuropathy
Gastrointestinal	Paralyticileus Hyperammonemia	Pseudomembranous colitis
Others	Increased risk of infection Platelet function abnor- malities, anemia Stevens-Johnson syndrome/toxic epidermal necrolysis Hyperlipidemia	Sepsis Catheter-associated infections Skin breakdown

## Web Table I Multisystem Complications of Refractory and Super-refractory Status Epilepticus