

Legal Name	Preferred Name				
Date of Birth	Sex	Gender	Pronouns		
 Primary Diagnosis G93.49 - Leukoencephalopathy with Brainstem and Spinal Cord Involvement (LBSL) E88.43 - Mitochondrial Aspartyl-tRNA Synthetase Deficiency Additional Diagnoses 					
Medications/Supplements					
Allergies					

Provider	Phone Number
	Provider



About the condition

Leukoencephalopathy with Brainstem and Spinal Cord Involvement and Lactate Elevation (LBSL) is an ultrarare, progressive neurological disorder that affects the brain and spinal cord. LBSL is caused by mutations in the DARS2 gene, which provides the body with instructions for making an enzyme called mitochondrial aspartyl-tRNA synthetase. As a result of mutations in DARS2, certain parts of nervous system do not have sufficient energy to function properly, affecting their function and the production of myelin.

Key Considerations

- **HEAD INJURY** Patients with LBSL are particularly vulnerable to severe consequences from **head injury**. Recommend thorough neurological assessment, extended observation, and low threshold for imaging.
- AGGRAVATING CONDITIONS Prevent whenever feasible; otherwise treat quickly and aggressively.
 Fever
 Dehydration
 Fasting
 Overheating
 Hypothermia
- **INFECTION** Diligently look for source of fever or symptoms suggestive of infection; treat aggressively.
- **MEDICATION INTERACTIONS** Patients may be taking custom prescription *"mito cocktails"* (high potency antioxidants and amino acids) to support metabolic needs. Consult with pharmacist and/or clinicians familiar with mitochondrial disorders and treatment. Additional labwork may be indicated.
- **ASSESSMENTS** Patient vitals (especially body temperature), lab results, etc. may be *out of reference range*. Inquire about *baseline*, and trust patients/parents as experts on their own "normal" values.
- **PROTRACTED RECOVERY** Patient recovery may be longer than expected. Plan for extended impact from surgery, anesthesia, illness, injury, aggravating conditions (see above), and/or change in medication.
- **REFERRALS AND FOLLOW UP:** Patients should be counseled to follow up with their primary care provider, neurologist, and/or metabolic specialist soon after discharge. Follow-up labwork may be indicated. Consult OT/PT as needed. Refer patient to new specialists as needed to complete care team.

Frequently Reported Symptoms (may first arise or worsen following aggravating event) □ Fatigue / exhaustion Mobility challenges Headache □ Energy depletion □ Balance difficulty □ Nystagmus / opsoclonus □ Heat/cold intolerance □ Gait disturbance □ Seizures □ Peripheral neuropathy Constipation Ataxia Dysarthria □ Spasticity Neuropathic pain □ Cold extremities (esp. feet) □ Sleep disturbance Dysphagia

Healthcare provider signature			
Provider name:	Date:		
Signature:	Contact number:		