

LEMS is characterized by weakness and fatigue especially of the muscles in the legs and arms. The disease may affect the patient's ability to engage in strenuous exercise and may make such activities as climbing stairs or walking up a steep walkway difficult. Onset is gradual, typically taking place over several weeks to many months. There is often a progression of symptoms whereby the shoulder muscles, muscles of the feet & hands, speech & swallowing muscles and eye muscles are affected in a stepwise fashion. The symptoms progress more quickly when LEMS is associated with cancer. Most LEMS patients also exhibit the following symptoms (sometimes called autonomic symptoms): dry mouth, dry eyes, constipation, impotence, and decreased sweating. LEMS patients with or without cancer may also undergo significant weight loss. The tendon reflexes are diminished or absent on examination. Hence, in summary, LEMS is often described as a clinical "triad" of proximal muscle weakness, autonomic symptoms and reduced tendon reflexes. The estimated worldwide prevalence of LEMS is about 2.8 per million, making it a rare disease. There are approximately 400 known cases of LEMS in the United States. When LEMS is associated with SCLC, the patients tend to be older and are more likely to be men than women. The average age of onset of SCLC is around 60 years of age. Approximately 3% of SCLC patients develop LEMS, but clinical symptoms of LEMS usually precede the SCLC diagnosis (sometimes by many years). When LEMS is not related to cancer, the syndrome may occur at any age, and the typical onset is about 35 years of age. LEMS is extremely rare in the pediatric population, and there have only been 11 affected children reported in literature.