Als lou gehrig disease

Health & Medicine, Disease

Amyotrophic Lateral Sclerosis (ALS), also known as Lou Gehrig disease, is a fatal, progressive disease that affects the motor neurons of the body. Attacking the nerve cells in the brain and spinal cord, ALS patients lose muscle control and thus becomes paralyzed (ALS Association, n. d.). According to the ALS Association, 15 people are diagnosed with ALS every day and that two per 100, 000 people deaths are due to ALS (n. d.). Patients stricken with the disease has a survival rate of two to five years from the onset of symptoms (n. d.).

However, with medical researches and breakthroughs, twenty percent of ALS patients get to live for five more years after being diagnosed (n. d.). ALS is a disease of the middle-age, meaning people falling in the 40-60 years old are more likely to be afflicted (Curtis and McDonald, 1994, p. 1047). In addition, men are more likely to develop ALS than women (p. 1047). Individuals who get ALS fromchildhoodor early adulthood are rare and may have caught an inherited type of the disease (p.

1047). ALS is part of the motor neuron disorder which causes muscle weakness and atrophy (Forshew and Hulihan, 2002). Atrophy is defined as “ wasting away or loss of muscle” (2002). When only the upper neurons are affected, the disorder is known as primary lateral sclerosis (2002). When it is the lower motor neurons, it is called spinal muscular atrophy or progressive muscular atrophy (2002). In the case of ALS, both upper and lower motor neurons are affected.

Degeneration of the upper neurons results in hyperreflexia, spasticity and a Babinski reflex while the lower motor neurons result in muscular atrophy,

fasciculation or skin twitches and weakness (Cotran, Kumar and Robbins, 1994, p. 1336). French neurologist Jean Martin Charcot was the one who initially recognized the disease in 1880s (Forshew and Hulihan, 2002). The term amyotrophic is rooted in Greek and the term can be subdivided into syllables: “ a” meaning no or negative, “ myo” pertains to muscle, and “ trophic” for nutrient; so in essence, amyotrophic means no muscle nutrient (2002).

It can be noted that nutrient in this sense does not pertain tofoodnourishment, rather signals coming from motor neurons to the muscles. The terms lateral and sclerosis may likewise be defined. The upper motor neurons pass through the lateral edges of the spinal cord. When the neurons do not work properly, signals to the muscles are absent, thus the muscles become weak, shrink and paralyzed/. When these neurons die, the lateral portions of the spinal cord becomes marked and scarred.

Sclerosis is the term used in medicine to refer to hardening and scarring (2002). Lateral sclerosis, therefore, is the scarring “ along the sides of the spinal cord caused by the death of upper motor neurons” (2002). Dr. Charcot used the term amyotrophic lateral sclerosis to refer to weakened muscles and scarring of lateral sides in the spinal cord. The figure below illustrates how the nerve cells look like in normal person and an ALS-afflicted individual.