

ALS/MND Glossary of Terms

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Alzheimer Disease (AD): A slowly progressive form of dementia that impairs intellectual function and memory

Analgesic: Medicine to control or prevent pain

Angiogenin: A protein that aids in the formation of new blood vessels

Anti-Apoptotic: A method that prevents cell death

Anxiolytic: A tranquilizer used to reduce anxiety, tension, and irritability

Astrocytes: Star-shaped cells of the nervous tissue

Axonal polyneuropathy: A neurological disorder originating in the peripheral nerves

Breath stacking: Air trapping caused when a new breath begins before the previous breath has been fully exhaled.

Cognitive impairment: changes in thought, emotion or behavior

Conditioning stimulus: An initial stimulus that establishes a baseline response from neurons, which can be compared to stimuli of greater or lesser magnitude.

Cyanosis: A bluish discoloration of the skin and mucous membranes (moist membranes like in the mouth or nose) caused by inadequate oxygen levels in the blood

Cytotoxic: Anything that causes cell death

Deviated Septum: Abnormal placement of the wall between any two chambers—usually between nasal cavities

Dysphasia: A speech disorder characterized by impaired communication and comprehension

Dyspnea: Difficulty in breathing causing shortness of breath

Edema: Swelling caused by excess accumulation of fluids in body tissue

El Escorial diagnostic criteria: A set of criteria to determine eligibility for clinical trials.

Endogenous: Something that grows within an organism, tissue, or cell

Enema: A process of introducing liquids to the rectum and colon via the anus. It can be used as a treatment for constipation

Enteral Feeding: Feeding through a feeding tube

Esophageal Sphincter: A ring of smooth muscle fibers located at the connection between the stomach and esophagus.

Flail arms: Severely weakened and wasted arms, especially when other regions of the body do not undergo a comparable change

Free Radicals: Atoms or groups of atoms with an unpaired number of electrons that can be formed when oxygen interacts with certain molecules.

Futility trial: A trial designed to show that a drug is not inactive

Glutamate: An amino acid precursor that is a major excitatory neurotransmitter in the brain and spinal cord. A substance in the nerve tissue that is used to communicate between different nerve cells.

Hypovolemia: A disorder in which the amount of circulating blood decreases

Hypoxemia: A condition that occurs when the blood does not contain enough oxygen.

Intrathecal: Administration of medication into the fluid surrounding the brain and spinal cord

Intubation: The insertion of a tube into the body such as inserting a tube into the wind pipe to assist breathing.

Maximal Voluntary Isometric Contraction: A test of muscle strength

Microglia: Cells of the central nervous system

Molecular signature: A unique biomolecular pattern associated with a specific biological context, such as a disease.

Motor neurons: neurons that activate muscles

Muscle Fasciculation: Muscle twitching

Muscular atrophy: Reduction or loss of muscle tissue

Myalgia: Muscle pain

Myelinated/unmyelinated fibers: Fibers covered (or not covered) in a fatty insulating sheath

Nephrolithiasis: The formation of a kidney stone

Neuron: nerve cell

Neuroprotective agents: agents that prevent damaging influences in the nervous system

Palliative Care: Care with the goal of minimizing the rate of progression, severity and/or discomfort associated with a disease and improving the patient's quality of life rather than finding a cure.

Pathogenesis: Development of a disease

Prooxidant: a compound or agent, such as iron that can generate "free radicals" (see entry above)

Proton Pump Inhibitor: A type of drug that stops the stomach from secreting acid by interfering with the movement of hydrogen ions across cell membranes.

Sepsis: The presence of infectious organisms, such as bacteria, or their toxins in blood or tissues

Sialorrhea: Excessive secretion of saliva

SOD (Superoxide dismutase): An enzyme. Mutations in SOD1 are often considered the cause of familial ALS. The SOD mouse model refers to a mouse model of ALS created by engineering mice to produce extra superoxide dismutase enzyme.

Supine: Lying flat on the back

Symptomatic agents: Agents that act only by reducing symptoms

Tachycardia: A rapid heart rate, usually over 100 beats per minute

Tachypnea: Abnormally fast breathing

Tau protein: Proteins that are primary components of neurons, but are found in all cells

Tracheostomy: A surgical operation that creates an opening in the trachea (wind pipe), usually for the insertion of a tube to assist breathing. The term also refers to the opening created.

Ubiquitin inclusions: inclusions of the small regulatory protein, ubiquitin

White matter: Matter at the end of the spinal cord composed mostly of myelinated nerve axons (the long tail-like ends of nerve cells) and neuroglia (connective tissue around certain nerve cells).