Proteins in Motor Neurons Altered in ALS Rats

Rats with a mutation found in some inherited ALS have changes to structural proteins that help the long process of the motor neuron, called the axon, to function properly. One of the neurofilament proteins in the ALS rats have more glycosylation, a chemical modification, compared to normal rats. This type of modification has been less studied than another modification, called phosphorylation. ALS rats in fact have more phosphorylation of the neurofilament protein. It is possible to find glycosylation in human brain after death. Further studies should be able to determine the possible role of this change in neurofilaments in ALS. The report by University of Osnabruck researcher Roland Brandt, Ph.D., and colleagues appears in the September issue of The Journal of Biological Chemistry.


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