Z2 I3   The Effects of Motor Learning on Synaptic Plasticity of Stellate Cells In Rat Cerebellum

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The purpose of this study is to examine how motor skill learning affects the dendritic morphology of the stellate cells in rat cerebellum by using golgi cox method. Young male rats were randomly allocated to a motor learning group(ML), a forced exercise group(FX), and an inactive group(IC). ML animals were trained transverse an elevated narrow beam requiring a significant amount of motor coordination to complete. FX animals were trained with running wheel and IC animals were housed in standard cages with little physical activity. Results showed that the motor learning animals have significantly greater dendritic arborization than both the FX and IC animals. Especially, ML stellate cells have much more irregularly shaped dendritic arborizations characterized by tortuous branch and high density of spine. These results suggest that motor learning regulates synaptic plasticity and affects the dendritic morphology in stellate cells.

Z2 I4   Cytochemical and Immunocytochemical Study on the Cellulase Activity In the Accessory Glands of the Digestive Organ of the Oriental Land Snail, *Nesiohelix samarangae*

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The histochemical, cytochemical, and immmunocytochemical investigations were conducted to find out the accessory glands of the digestive organ secreting the cellulase in the oriental land snail *Nesiohelix samarangae* under the LM, SEM, and TEM. It was found that the Type 1 and Type 3 cells out of five types of the epithelial cells of the digestive gland were labeled with the immunogold (protein-A gold) particles. Otherwise, none of epithelial cells of the mucus gland and the salivary gland were not labeled with the immunogold particles.