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# NERVOUS SYSTEM REGENERATION

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### **The neurotropic action of melatonin (MLT).**

The effects of Melatonin (MLT) treatment have been tested since several years in many patients suffering from disseminated and acute sclerosis, in congenital diplegia and hereditary ataxia, in spastic pseudosclerosis, in different moulds of mental retardation, in many destructive features of "petit mal" and in various cases of sleeplessness. The usual administration route has been the oral one in the late hours of the day. The dosages have turned round some mg every day and the statement can be clinched that MLT exerts no apparent toxic effect even at higher dosages (LERNER & NORDLUND, *J. Neural Transm.*, 1978, **13**, Suppl. 339-347). In mental retardation the learning of the meaning of the words is accelerated, the association of the word sounds with the objects and the object qualities becomes more and more ready, the arrangement of the single speech components into syntactically correct combinations grows more and more appropriately.

In congenital spastic paralysis, and in congenital diplegia the muscle weakness and the limb spasticity gradually improve, at the same degree as the involuntary movements and the ataxia.

In several patients with chronic, intractable benign pain syndromes MLT has played the role of an efficient recovery drug. The eventual simultaneous depression and apathy state are relieved and reversed in a state of alertness and mental efficiency.

The MLT treatment can be effectually flanked and strengthened by simultaneous treatment with  $\alpha$ -tocopheryl (acetate), antiepileptic drugs, etc., according to the ethiology and pathogenesis of the syndromes.

The opinion is signified that MLT mostly acts as a neuronal modulator.