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Fosphenytoin Sodium

National Cancer Institute

Source

National Cancer Institute. *Fosphenytoin Sodium*. NCI Thesaurus. Code C47543.

The sodium salt form of fosphenytoin, a prodrug that is hydrolyzed to the anticonvulsant phenytoin upon parental administration. Phenytoin exerts its effect most likely through an enhancement of sodium efflux from neurons in the motor cortex. This leads to a suppression of excessive neuronal firing and spread of seizure activity. Other physiologic effects from actions of phenytoin include modulation of the voltage-dependent calcium channels of neurons, inhibition of calcium flux across neuronal membranes and enhancement of sodium-potassium ATPase activity of neurons and glial cells. (NCI05)