12. Physiological Interpretation of the Ventral Intermedial Nuclei (V.im.) of the Thalamus in Relation to Parkinsonism

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The ventral intramedial nucle (V.im.) of the thalamus lying posteriorly to the VL and anteriorly to the VPL, is interpreted as the locale, to where the afferent impulses from muscle spindle are projecting. Peripheral stimulus is given by the needle electrode inserted around the peripheral nerve (ulnar or fibular) by the intensity of 6-8 volts, which is lower than the intensity to cause muscle twitching. Evoked potentials for this peripheral stimuli are recorded in the V.im. area in 8 cases and in two cases by the 20 μ microelectrode. Conduction velocity for evoking this is measured as 85-90 meters/second, which is naturally far faster than motor nerve conduction. These would suggest the projection of GI fibers to this area, arising from muscle spindle.

Surgical lesion in V.im. does improve tremor only, and not rigidity. Electrical stimulation of this area usually causes increase or decrease of tremorous movement and causes no change in sensory quality.

13. Brain Stem or Lenticular Nucleus Lesion Effect on Epileptogenic Convulsion elicited by Intravenous Administration of Metrazol

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Utilizing a chronic experimental set of cats, an attempt was done to make an analysis of brain stem or lenticular lesion effect on epileptogenic convulsion elicited by intravenous administration of Metrazol solution. Epileptic discharge was recorded bilaterally at posterior sigmoid gyrus, lenticular nucleus, ventralis lateralis nucleus of the thalamus and substantia