4) Approach to superior colliculus (stratum lemnisci) for congenital nystagmus.

New apparatus (IVth type) and new operation techniques devised by the authors were employed. The results obtained were gratifying with minimal risk, which will be discussed by the authors.

27. Further Clinical and Physiological Observations on Stereotaxic Surgery for Involuntary Movements

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Further observations of our stereotaxic operation for involuntary movements are reported. The stereoencephalotome which we designed has been improved. At present, the fifth model is used.

Eighty-four patients of involuntary movements have been operated during the past five years. For parkinsonism, we performed pallidotomy or pallido-capsulotomy with considerably good results, while recently we have found the most effective point of lesion for both the rigidity and tremor between the thalamus and the internal capsule, i.e. directly ventral, lateral and posterior to the ventrolateral nucleus of the thalamus, and we have called the destruction of this point thalamo-capsulotomy (T.C.), which has been performed on 13 cases with good results.

During the operative procedure, recording of the electrical activity and electrical stimulation of subcortical nuclei were made with multiple depth electrodes. Similar rhythm to α-waves was obtained from the globus pallidus. Stimulation of the thalamo-capsular region caused increased monosynaptic H-reflex as well as increased excitability of alpha motor cells of the anterior column of the spinal cord in the electromyogram of the corresponding soleus muscle, while stimulation of the globus pallidus elicits only an increase of rigidity of the corresponding muscles, without any increase of H-reflex.

Experiences with Stereotaxic Surgery, Particular Reference to the Location of Abolition of Tremor

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With the aid of image amplifier as well as roentgen control, 48 cases have