

VENTRALIS INTERMEDIUS THALAMOTOMY FOR THE RELIEF OF THALAMIC PAIN. PATHOPHYSIOLOGY OF DEEP PAIN. C.Ohye, M.Hirato, T.Shibazaki, T.Hirai, H.Wada, Y.Nagaseki, Y.Kawashima and K.Denda. Department of Neurosurgery, Gunma University School of Medicine, Maebashi, Gunma, 371-JAPAN.

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In several cases with parkinsonism, we noticed that concomitant deep muscle pain was ameliorated by the selective ventralis intermedius (Vim) thalamotomy for tremor. Therefore, Vim thalamotomy guided by depth recording is applied to the cases with intractable pain of central origin.

Ten cases with thalamic pain after stroke were studied. Majority of them exhibited spontaneous continuous pain exaggerated by passive or active movement of the affected limb with, more or less, paresthesia and general hypesthesia. Stereotactic thalamotomy was done under the radiological and physiological controls.

CT scan revealed some correlation between the nature of pain and pathological change. Spontaneous deep pain seems to be more related to the abnormal low density area in the ventral posterolateral thalamic region. In such cases, thalamic electrical activity was less than that in parkinson cases. Three cases showed exaggerated thalamic activity. Vim only or combined with centralis lateralis were coagulated finally. In 6 cases, the result was satisfactory (maximum follow up for 3 years), no remarkable change in 4.

Thalamic Vim nucleus may play an important role in controlling deep sensation including muscle sense, and in pathological state, it may cause deep pain.

BILATERAL OPEN THORACIC CORDOTOMIES IN THE AWAKE PATIENT. Pagura J.R.; Passarelli p.; Rebuglio R. Centro Integrado de Dor, São Paulo-Brazil.

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Bilateral malignant pain below the thorax may be controlled by bilateral percutaneous cervical cordotomies, but this procedure increases morbidity over unilateral cordotomies even after waiting several weeks between surgeries. Open thoracic cordotomies have, because of general anesthesia, no cooperation from the patient. We developed a combined approach using direct visualization of the spinal cord, radiofrequency lesion and regional epidural anesthesia, with full patient cooperation. This increases the chance of limiting the lesion to the spinothalamic tract.

Methods: analgesia is obtained through epidural injection of 10 cc. of 0.25% bupivacaine, along with mild sedation. After performing a thoracic laminectomy and opening the dura, the cordotomy electrode, with the tip bent at a 90° angle is introduced in the cord and stimulation and lesion done as in the percutaneous procedure, with constant monitoring of voluntary motor function.

Excellent relief was obtained in all of our 27 patients. Difficulty voiding occurred in 3 patients and reversible monoparesis in another two.