by Guiot (1961), Riechert (1964) and Handa (1967) and is thought to be the best method of surgery for the purpose of avoiding serious functional deficits.

Recently, total extirpations were performed in our service by the method of combined stereotaxic operation in two cases of children with seep seated AVM. One of the cases was 12-year-old boy who had it in the rt. paraventricular region under the motor cortex and the other case was 11-year-old boy who had it in the lt. atrial portion of lateral ventricle. In both cases, AVMs were nearly thumb-tip in size and the patients were suffered from episodes of repeated subarachnoid hemorrhages for over 5 years. Our operative procedures were based on the following steps.

1) Stereotaxic apparatus was attached to patient, and AVM and its supplying vessels were clearly presented in the stereotaxic serial angiograms of antero-posterior and lateral views.

2) Burr holes were made at the rt. parietal region in former case and the lt. posterior temporal in latter case. Ascertaining the direction correctly on the films, the needle was introduced slowly and carefully to the site of AVM.

3) Thereafter it was replaced by teflon tube, and then needle tract was stained by injection of patent throught the tube. Stereotaxic apparatus was took off and craniotomy was performed with regular procedure.

4) After the minimum resection of cortex around the needle tract which was stained by patent-blue, the AVMs were totally extirpated in both cases successfully. Postoperative course were excellent and uneventful without any serious complications.

16. Response Pattern of VB and CM-Pf Complex Neurons

Hiroshi Kato, M.D. and Masayoshi Kowada, M.D.
Division of Surgical Neurology, Research Institute of Brain and Blood Vessels, Akita

An investigation was made to study functional correlations between the VB or the CM-Pf complex and the dorsal column-medial lemniscal or cervico-thalamic tract in cats anesthetized with Nembutal.

By stimulating the nucleus cervicalis lateralis at the level of C1-C2 and the nucleus cuneatus medialis, it was recomfirmed that VB neuron received inputs of these two nuclei monosynaptically and CM neuron did monosynaptically inputs of the nucleus cervicalis lateralis. CM neurons often responded with dispersed and long latency. VB and CM neurons showed spike inhibition ranged from 20 to 250 msec. in duration following responses to electrical stimulation. When the conditioned peripheral stimuli were applied simultaneously, such spike inhibition could not be observed in VB neuron, while not affected distinctly in CM neuron.