

tion. The effect of LSD-25 in four cases of phantomlimbs (after amputations of limb) and in two thalamic syndromes is reported. By the application of LSD-25 phantomlimb, phantompain and hyperpathy in thalamic syndromes can be very changeable. The report consists of the description of subjective experience of patients and objective data of electromyogram of the muscle.

LSD-25 is known as the drug which causes experimental psychosis, but it may be suggested that this research contributes to the study of body-image of neurological origin. On the other hand, judging from the effect on phantompain and thalamic syndromes, LSD-25 is to be considered as a therapeutic drug in patients suffering from the above mentioned syndromes.

31. Hemodynamics of the Galen's Vein and General Anesthesia (Report II)

Rokuro TAKAYAMA, Kihachiro MASUDA, Kazuo UGAIN, Hideyuki HIRAI,
Isao KATAYAMA AND Shigeo TOYA

Department of Surgery, Keio University School of Medicine

We made experimental studies on the influence of various anesthetic agents upon the circulation of the brain stem by means of a newly devised method of determination of hemodynamics of Galen's vein.

Agents used were ravonal, eunal, nitrous oxide, cyclopropane, ether, trilene and chloroform. In addition hypoxia and hypercapnia were subjected to the same study, for they are common complicating factors in the conduction of anesthesia. The results are as follows:

1. Ravonal, nitrous oxide, cyclopropane, ether, trilene and chloroform increase cerebral blood flows, and the degree of increase is always more marked in the brain stem than in the cortex.
2. Eunal causes a unique change in the cerebral blood flow.
3. Both hypoxia and hypercapnia cause increase of cerebral blood flow, and increase of blood flow in the brain stem is more marked than in the cortex.
4. Generally speaking, the blood supply in the brain stem tends to be adequately maintained under general anesthesia, while the blood flow in the brain stem shows a more stable attitude than in the cortex against fluctuation of systemic blood pressure during conduction of anesthesia.