noticed, and 3) in psychological standpoint, self-confidence and brightness regain and mental test (WISC) revealed an increase in IQ from 77 to 102.

II. Irritable behavioral disorders in epilepsy:

Seven years old Japanese girl (H.S.) had complained of convulsion (left half of the body) and violent behavioral disorders under the medication of Ospolot (0.4), Aleviatin (0.15), Luminal (0.05), Tegretol (0.4), Wintamin (0.025) and others. Since Forel-H-tomy was performed at the right side over 11 months ago, remarkable improvements have been obtained under none of the medication. 1) Clinical seizures have disappeared and EEG abnormalities of the right hemisphere (siffuse dysrhythmia) have been also improved. 2) Preoperative character disorders such as aggressiveness, impulsiveness and unsteadiness disappeared. Mental test, which could be hardly performed before surgery because of her incorporation revealed an improvement of mental condition and also IQ after surgery.

7. Electrophysiological Observations during Stereotaxic Amygdalotomy

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8. The Effects of Septal Lesion on the Operant Behavior of the Rabbit

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Effects of bilateral septal lesions in the rabbits were examined with Skinner box in bar pressing for food on the schedule of the continuous reinforcement (CRF) and the differential reinforcement of the low rate 10 sec. (DRL). Thirty-six adult male rabbits of about 3000gr were used. Animals were trained for 30 min. a day as a session. CRF learning was regarded as perfection when animals were reinforced over 100, and continuously DRL learning was performed up to getting stabilized reinforcement rate. The lesions were produced electrolytically through a bipolar stainless steel electrode which was positioned in the brain at A 4.0 mm, L 1.5 mm
and H 0.5 mm on Sawyer's atlas. Localizations of septal lesions were verified histologically. The lesions were situated in the mid-lateral part of septal area and the size of lesion was about 2 mm in diameter in all cases. But they involved to a small degree the adjacent caudate nucleus in a third animal.

**Results:**

1. **CRF Schedule**
   1) 1.9 sessions (mean) were spread to get reinforcement over 100 in control animals, 11.9 sessions in septal lesioned ones before CRF, and 5.3 sessions in sham lesioned before CRF.
   2) Septal lesioned animals after CRF were similar to controls (2.5 sessions).

2. **DRL-10 schedule**
   1) 35.8 sessions (mean) were spared to get stabilized reinforcement rate in controls, 68.8 sessions in septal lesioned ones before DRL, and 37.4 sessions in septal lesioned after DRL.
   2) The distribution of the inter-response time and the transition probability of bar pressing showed bimodal with one mode occurred at the near range of 10 sec. (the second mode), and the other of 0–1 sec. (the first mode) in controls. In septal lesioned animals before DRL, the second mode was spread out at the range of 10–15 sec.

**Conclusion:**

1) The deficit of CRF learning in septal lesioned animals seemed not to be due to decrease of hunger motivation and memory deficits, but disturbance of exploratory motivation or inhibitory system.

2) Temporal discrimination was disturbed in the DRL learning of septal lesioned animals.

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**9. Spasmodic Torticollis-like Posture of the Cat Introduced by the Destruction of Mesencephalic Tegmentum**

Degeneration of Nerve Fibres Caused by the Destruction

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