complex was due to activity in thalamocortical fibers while the following positive wave was the result of post synaptic events in the cerebral gray. The similarity in behavior of the latter component and the primary response to tactile stimuli further suggested that they were both produced by the same cortical cells. Thus, it appears that the contribution of thalamic cells to peripherally evoked cortical activity is minimal.

2. Effects of reserpine (Serpasil) on epileptic monkeys. — JOSEPH G. CHUSID, LENORE M. KOPELOFF, and NICHOLAS KOPELOFF, New York, N.Y.

Responses of monkeys made chronically epileptic (by alumina cream applications to a cerebral hemisphere) after the intravenous administration of reserpine (Serpasil) were studied. Severe behavioral changes like those occurring in similarly treated normal monkeys followed the intravenous administration of 1 mg/kg. reserpine. Treated animals were characterized by motor inactivity, relaxation, tameness, reduced aggressiveness, and disinterest in environment. In addition, sialorrhea, shivering, tremulousness, and occasional diarrhea were observed. In the presence of profound behavioral change (two hours after injection) the EEG frequently showed little additional change that could be attributed to the reserpine; occasionally the EEG appeared slightly more, or less abnormal than in the control pre-treatment period. It was difficult to provoke clinical seizures by the stick prodding technique during the height of the reserpine effect, whereas epileptic attacks could be readily precipitated by relatively small doses of intramuscular Metrazol (16 mg/kg. or less).

3. Extra and intra cerebral recording of seizure discharges in the experimental epileptic monkey. — CHARLES HENRY and LAWRENCE KRUGER, Hartford, Conn.

A chronic problem faced by the clinical electroencephalographer is the matter of negative or equivocal EEG data in cases of suspected or even categorical clinical epilepsy. A variety of ingenious special recording electrodes have been evolved in different laboratories to reduce the incidence of such false negative cases.

Even in the experimental epileptic animal, where the site of the lesion is known, it may be difficult to clearly demonstrate the electrical focus by standard scalp electrode placements. Therefore, we have attempted to utilize some of these newer techniques with the hope of revealing the implanted abnormality.

Pharyngeal electrodes were not found helpful. They are readily inserted only in the anesthetized monkey, which also reduces the abnormality, and they are susceptible to artifact.

Sphenoid electrodes were attempted following a suggestion by Pampiglione. These are inserted without undue difficulty in the restrained animal, and are very useful in the detection of temporal lobe irritative discharges, even when the scalp temporal electrode is at best ambiguous. Both spontaneous and Metrazol induced seizures were investigated.

Intracerebral depth electrodes consisting of six recording points along a fine wire shaft have been aseptically implanted and left in place for months. These give a highly focal recording specific to the region of the irritative lesion.

4. Prolonged status epilepticus in petit mal. — PETER KELLAWAY and DORA CHAO, Houston, Texas.

It is well known that patients with idiopathic petit mal epilepsy may have hundreds of brief "absence" seizures daily. Cases have also been reported in which the "absence" attacks were for periods so closely spaced that the patients appeared to be in a confused state for many hours (so called petit mal status). The electroencephalogram during such episodes reveals almost continuous spike and wave activity with only occasional episodes of very brief duration of relative normality.

During the past five years eleven cases (children) have been seen in the Blue Bird Clinic in which episodes such as described above lasted for weeks and even months. Electroencephalographically, these children showed either continuous 2-3 per sec. spike and wave activity predominantly in the parietal or occipital region with occasional generalized bursts of this activity, or *almost* continuous spike and wave activity interrupted by very brief (maximum 10-12 sec.) episodes of more normal, but still slow, activity.

In nearly all of these cases the sudden deterioration of the patient in terms of apparent intelligence, behavior, etc., suggested the possibility of degenerative disease. The patients all proved to be extremely refractory to medication, including Tridione and Phenurone. However, once a response to medication or the ketogenic diet was established, the clinical and electroencephalographic picture was reversed and the patients returned to their previous normal state of mental function.

This clinical pattern should be distinguished from a condition more commonly observed in children in which the mental deterioration is not reversible and in which the electroencephalogram is of the generalized slow spike and wave type or "petit mal variant". In this group there is often a history suggesting some type of early severe cerebral insult.

5. Patterns of electrical activity elicited by photic stimulation recorded from implanted electrodes in the monkey. — LAWRENCE KRUGER and CHARLES HENRY, Hartford, Conn.

Most of the available data on evoked afferent responses in the central nervous system have been derived from anesthetized preparations. A distinct advantage provided by the chronic implantation technique is that it affords opportunity to study the unanesthetized animal and to compare this condition with the effects of anesthesia in the identical recording situation.

Using such implanted preparations we have explored the relationship between the evoked response to photic stimulation and intensity of the light recorded from electrodes placed in the regions of the lateral geniculate nucleus, optic radiations, and striate cortex. In the absence of anesthesia there are variations in response form and amplitude with increased stimulus intensity, without a measurable change in onset latency. With barbiturate anesthesia there is an inverse relationship between brightness and onset latency in the striate cortex.

The excitability cycle determined by paired flashes was found to vary with site of recording, intensity of the stimulus, and state of anesthesia.