175. Pursuit Motion in Patients with Head and Neck Injuries

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The smooth pursuit motion of the eye which was elicited by moving target was recorded by means of electrooculogram (EOG). The subjects which were selected for this procedure were 105 cases with the head and the neck injuries. All cases did not show any impairment of the visual acuity and the visual field. The age ranged from 6 to 67 years old. The results were evaluated from EOG data:

1. Irregularities of the pattern due to smooth pursuit motion of the eyes were major results in the present study.

2. 28 cases out of 105 revealed the severe disturbance of pursuit eye movements.

3. The saccadic motion, on the other hand, were assumed to be almost normal in the present cases.

4. Unilateral impairment of the eye was not obtained.

Until now, in spite of various and broad complaints, there were no clinical tests for evaluating or finding out the positive impairments in those patients, however, EOG test, especially, smooth pursuit motion seemed to be affected. This is the major point to emphasize in the present results.

176. Nystagmus and Optokinetic Nystagmus in the Patient with Whiplash Injury

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We reported on the result of nystagmus and optokinetic nystagmus in 194 cases of so called whiplash injury. All cases neglected head injury. Nystagmus is observed in 70 cases i.e. 36 per cent, but other neurological findings are negative in the almost all cases except for equilibratory, cervical radiculopathic, and sensory disturbances. O.K.P. test is a examination for the oculomotor function and the

test reveals typical pattern in the C.N.S. lesions. O.K.P. test in the patient with whiplash injury reveals brain stem lesion pattern as shown in the figure i.e. 1) loss of slow phase, 2) poor reaction to optokinetic stimulation, 3) decrease of fusion

INCIDENCE of NYSTAGMUS

Time Between Injury and First Exam.	0 - 1 W	1 - 2 W	2 - 3 W	3 - 6 W	6 W - 6 M	more than 6 M
No. of Cases	39	22	15	22	46	50
No. of Cases with Nystagmus	18	8	7	7	18	12
Per cent	46	36	47	32	39	24

$$\frac{\text{Total, No. of Cases with Nystagmus}}{\text{Total, No. of Cases}} = \frac{70}{194} = 0.36$$

COMPARISON of INCIDENCES for VARIOUS NYSTAGMUS

GAZE NYST. POSITIONING NYST. POSITIONAL NYST.

34.1 24.4 0.56 (per cent)

OPTOKINETIC PATTERN TEST (OKP)

Fig. 1.

limit, 4) sometimes, inversion of optokinetic nystagmus. Nystagmus and optokinetic nystagmus are useful test not only for diagnosis of the brain stem lesion, but also for the recovery process of patients with whiplash injury.

177. Whiplash Injury from the Psychosomatic Standpoint

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The patients who had whiplash injury have numerous physical and psychosomatic complaints, and clinical findings are so various that it is very difficult to treat them. We made the follow-up study from the psychosomatic standpoint on 189 patients with whiplash injuries who came to our clinic last year.

The observation was done, on the one hand, from the psychiatric standpoint using Cornell Medical Index, and the other, using our own classification; that is, to classify 4 stages from mild cases to serious ones, and made the interdependent relation. According to our observation mentioned above, there was no significant relation between the physiological and the psychosomatic conditions. On the other hand, we tried to know the factors involved in the psychosomatic condition.

Table 1.

Our Classification	Our Criteria for Treatment
1. Subjective Complaints	Bed Rest for 1-2 wks. with Anti-edema and Anti-inflammatory agent
2. (Grade 1)+Clical Findings	Bed Rest for 4-6 wks. 1+Low Frequency or Local Injection etc.
3. (Grade 2)+Neurological Findings	Bed Rest for 3-6 mhs. 2+Traction etc.
4. (Grade 3)+Dislocation or Fracture in Cervical Vertebrae	Red Rest for 6-12 mhs. 3+External Support or Surgery etc.

Table 2.

Our Criteria for Psychosomatic Treatment
1. Explanation and Suggestion
2. 1+Drug Therapy such as Tranquillizer
3. 2+Consultation to Psychiatric Clinic
4. 3+Psycho Therapy (C.M.I.)