good effect in the control and prevention of the post convulsive confusion despite its known anti-convulsant property in the procedure aforementioned.

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PSYCHOTROPIC DRUG IN THE TREATMENT OF PSYCHIATRIC COMPLICATIONS AND SEQUELAE OF HEAD INJURY

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The incidence of head injury has been increasing every day and the most common cause is traffic accident. Therefore the need for careful review of the medical status of brain disorders associated with trauma has become increasingly evident. On the one hand, the diagnosis, evaluation, and treatment of head injuries have become more complicated. Concurrently, psychiatric syndromes following injury to the head are of growing medical interest because of their frequency, severity, and medico-legal importance. Prior to 1940, psychiatrists and neurologists were concerned primarily with the demonstrable organic damage which resulted from head injury, and with the treatment of gross sequelae, such as epileptiform attacks and major deviations in behaviour. However, over the past 40 years, physicians have gradually come to realise that injury to the head does not necessarily involve injury to the brain. Nor does brain injury inevitably result in demonstrable disabling symptoms or mental disorders.

In brief, current medical concern is no longer restricted to the nature and residual effects of permanent brain damage. It has been extended to apply to all syndromes following head injury, which may or may not involve brain damage. And, concomitantly, clinicians have become aware of the innumerable complex and subtle variables which must be considered in connection with such phenomena. These include the patient's pretraumatic personality, including his capacity for object relationships, and the conscious and unconscious factors which governed his relations with other people, his occupational and domestic history; and, in some cases, the circumstances of the accident itself. Investigation of the patient's post traumatic behaviour is equally crucial, of course. And, in fact, although evaluation of the complex interaction of psychosocial variables is an inherent part of psychiatric practice, perhaps nowhere is a more intricate combination of organic, social, and psychological components encountered than in the stages of adaptation following head injury.

The classification of brain disorders associated with head injury is very confusing. Different authorities and text books have their own ways which are not similar. In our opinion, the classification in the Henderson and Gillespie's Text book of Psychiatry, tenth edition, 1969 is simple and more practical. According to the text book, the classification is as follows.

1. Post-concussional and post-contusional syndromes; including deliria and transient dysamnesic states.
2. Post-traumatic dementia; including personality changes and Korsakoff's psychosis.
3. Other neurological complications and sequelae; including epilepsy, aphasia and subdural hematoma which we shall not mention today.

After a minor head injury with concussion, the mental symptoms are transient, disappearing usual-

ly in a few days. In addition to complaining of headache, the patient may be dazed, irritable, restless and for some time confused. The effects of cerebral confusion are more severe and tend to be much more persistent. The patient may proceed through the phases of stupor, delirium and confusion as he slowly emerges from coma following a major trauma. He may then recover completely, or show residual disabilities of lesser or greater severity. Post contusional Syndrome, in this condition, the patient is apt on recovering full consciousness to complain for some time of a group of symptoms. They are headache, which is usually throbbing and aggravated by stooping and physical or mental stress; dizziness; increased fatigability; impaired concentration; slowing of thinking process and forgetfulness; irritability, and over sensitivity to noise; and a decreased tolerance of alcohol. The patient realises that he is ill and is often anxious and depressed.

The prognosis is determined by a number of factors which we have discussed from the beginning. However, we would like to mention Ritchie Russell's report in 1934 that anxiety about compensation hinders recovery. Ritchie Russell reported that after 18 months, 35 per cent of his compensation cases had not reported fit for work, while in the non-compensation group only 9 per cent had failed to do so. The prognosis is also influenced by age, those over 40 being less successful in getting back to work quickly.

Gross and permanent dementia following head injury is rare and one should not conclude that damage is permanent until at least 18 months after injury. However, transient psychosis is not uncommon in our series. It is found that about 10 per cent of total cases of head injury at our research centre develop psychotic symptoms. This psychosis resembles a mixture of organic and schizophrenic-like symptoms. The duration of the psychosis varies from a few weeks to several months.

There are other big groups of psychiatric syndromes which we would like to call psychoneuroses precipitated by head injury. These syndromes are not significantly different from the conventional psychoneuroses. Most of the patients show anxiety state, conversion symptoms, hypochondriasis and depression.

In brief, psychiatric symptoms following head injury can resemble almost any form of psychosis, psychoneurosis, personality disorders and organic brain syndromes. In many cases, they are transient and in others are permanent. The most effective way of helping these patients requires the cooperation among neurologists, neurosurgeons and psychiatrists. Psychiatric treatment should begin immediately after neurological or neurosurgical treatment. Most psychiatrists agree that all treatment modalities have their places in the treatment of these conditions. Therefore psychotropic drugs are helpful when they are used correctly and appropriately.

We would like to summarize the psychotropic drugs in the following way:—

1. Antipsychotic drugs: Psychotropic drugs of this class have been called ataractic and neuroleptic. For some time they were described as the "major" tranquillizers to distinguish them from the "minor" or anti-anxiety drugs. As the group name implies, drugs of this kind have striking effectiveness in the treatment of psychoses including those from head injury.
   They are phenothiazine derivatives, Butyrophenones and Thioxanthene Derivatives.
2. Antianxiety drugs: As the antipsychotic drugs proliferated, so did a variety of agents with less dramatic and less specific tranquillizing attributes. However this group of drugs are still helpful in reducing anxiety in psychoneuroses following head injury, particularly when used in combination with psychotherapy.
   This group of drugs are Glycerol derivatives, Benzodiazepine derivatives and Diphenyl methane derivatives.
3. Antidepressant drugs: These drugs have proven to be very difficult to define. All share a reputed or demonstrable effect upon depression including depression following head injury.
   They are Tricyclic derivatives, Hydrazide MAO Inhibitors, Non-Hydrazide MAO Inhibitors and stimulants.

In summary, the use of psychotropic drugs in the treatment of psychiatric syndromes following head injury is very helpful when they are used correctly and appropriately. However, one should not overlook the importance of psychotherapy either in individual or in group.

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SOME OBSERVATIONS ON THE GUILLAIN – BARRE SYNDROME IN SURABAYA

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Since the eradication of poliomyelitis, Guillain-Barre syndrome (GBS) remains one of the most crippling neurological diseases. Although many scholars have written about it, treatment remains symptomatic with a mortality rate of 25% (5) The opinions are divided among neurologist regarding the value of treatment with corticosteroids and in one of the recent textbooks it is still written, that the value of treatment with corticosteroids is uncertain.

GBS is frequent in tropical countries, but reports from these countries on this disease are seldom, probably because of the hopelessness of this syndrome.

This is a report of 67 patients seen in Surabaya at the division of neurology, University of Airlangga, school of medicine and the private offices of the author. In this report the author further presents the result of a new form of treatment used in University Hospital in Surabaya.

MATERIALS AND METHODS

As criteria for selection the author used the criteria as mentioned by Mc. Farlan: (4)

1. The paralytic illness may follow a non-specific infection, but there is no preceding or accompanying illness of a type known or thought to be associated with polyradiculoneuropathy.
2. Sensory impairment may occur, but is less severe than motor impairment.
3. Diffuse lower motor neuron paresis is usually rapid in onset, often ascending, usually symmetrical, may be proximal and distal or both.
4. There are ten or fewer white blood cells per cubic millimeter in the cerebro-spinal fluid (CSF).
5. There is protein of 60 mg in CSF or higher.

Between the first of January 1957 until 1st January 1973, 67 patients were seen at the outpatient department of the University Hospital or at the private offices of the author. They were admitted in the University Hospital or the private hospital but were all examined by the author, except during the years of 1962 and 1963 when the author was in the United States.

In all patients, besides a neurologicl examination a complete blood count, differential count, platelet count and urinalysis was performed, Since the diagnosis was based on the CFS findings, in all patients a lumbar puncture was performed. Patients with a positive serologic reaction for syphilis were excluded from this study.

Clinical Findings.

The age and sex of the patients were as follows: