ELECTROENCEPHALOGRAPH

ST. JOSEPH REGIONAL MEDICAL CENTER

Lewiston, Idaho

PATIENT NAME: McRae, Davio
PATIENT #: 03 95 54
ROOM #: 4E06
AGE: 21
EEG #:
DATE: 11-1-89
REFERRED BY DOCTOR: G.A. Moreno, MD
T.W. Hill, MD
TO DOCTOR: J.J. Stockard, MD
FOR:
HISTORY:

DIAGNOSIS: Attentuation Grade II, generalized.

INTRODUCTION: This EEG was performed as a portable recording in an intensive care unit on a stuporous patient who was on a ventilator. The patient was receiving Dilantin as the only stated EEG-active medication. Referral indication for the test was paroxysmal alterations in the level of obtundation and the amount of agitation, stereotyped nonpurposeful movements and the posturing being shown by the patient over the 6 hours prior to the study - - to rule out seizure activity or other acute change.

DESCRIPTION: The entire recording was dominated by low-voltage, mixed-frequency activity which showed little spontaneous or reactive variability. This background activity comprised an add mixture of low-voltage alpha, beta, and theta activities all superimposed on arrhythmic very slow 0.5-1 Hz low-amplitude continuous unreactive delta activity. Intermittent theta components occurred maximally over the right hemisphere, as did the sporadic beta/alpha-frequency components which were superimposed upon the diffuse delta slowing. The lowest frequency of the delta activity itself in greatest degree of attenuation of voltage of background activity occurred over the left frontotemporal and parasagittal head regions. The patient demonstrated a sinus tachycardia averaging approximately 90 beats per minute in a single-channel (modified lead II) EKG rhythm strip obtained during the EEG, but there were no definite cardiac arrhythmias or other obvious ECG abnormality during this sample apart from the sinus tachycardia (as judged from a very limited single-channel monitor).

INTERPRETATION: The EEG is markedly and diffusely abnormal due to the severe attenuation of electrocerebral activity and absence of any normal background rhythms. The absence of spontaneous or reactive variability and continued very low-voltage generalized arrhythmic delta activity is of grave prognostic significance with respect to the chances of significant recovery of higher cerebral function in this case.

There was no seizure activity, inter-ictal epileptiform abnormality, PLEDs, projected dysrhythmia (of the type sometimes associated with increased intracranial pressure), triphasic or periodic complexes, or other diagnostically specific or acute changes. The constellation of the EEG findings described above is consistent with severe post-traumatic/anoxic-ischemic encephalopathy with diffuse neocortical injury, particularly in the absence of hypothermia, barbiturates, or other sufficient doses of CNS depressant drugs, post-ictal states, etc. to suggest any potentially reversible basis for these EEG findings at this juncture in this clinical context.

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DICTATED BUT NOT READ

J.J. Stockard, M.D.

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