

EEG/EP Patient Report

Physician/Practice Information:

[REDACTED]

Study Technician:

[REDACTED]

Ordering Physician:

[REDACTED]

Signature

Patient Information:

Name:

[REDACTED] a

ID:

[REDACTED]

Birth Date:

[REDACTED]

Study Information:

Order Notes:

Data-Set ID:

[REDACTED]

Date Uploaded:

[REDACTED]

Test Notes:

Study Findings:

Task Performance Results demonstrated low Button Press Accuracy and markedly prolonged Median Reaction Time, consistent with impaired focal attention, stimulus processing and executive function. Although the Button Press Accuracy is low, it is adequate enough to result in reliable N200 and P3b measures. False alarms were in the normal range

The P50 Standard Average Amplitude is normal.

The N100 Standard Peak Amplitude and Average Amplitude are decreased, consistent with impaired attention and memory.

The P200 Standard Peak Amplitude is decreased, consistent with slow reaction times and reduced accuracy of stimulus classification.

The N200 Target Peak Amplitude is increased negative amplitude and the Average Amplitude is decreased. The Latency is prolonged. This is consistent with impaired executive function and attention.

The P3b Target Peak Amplitude and the Average Amplitude are decreased and the Latency is prolonged, consistent with impaired stimulus evaluation and classification speed.

The Slow Wave Target Latency is normal.

The P3a Distractor Peak Amplitude and Average Amplitude are decreased, consistent with impaired executive function.

Peak Alpha Frequency is normal.

There is significant right-left asymmetry noted in the Parietal lobe amplitudes, with the left side being decreased in amplitude comparatively.

Clinical information provided by the referring healthcare provider indicates the patient was involved in a motor vehicle accident on [REDACTED] in which the patient's car was rear-ended at high speed. The patient states the top of her head hit the ceiling of the car.

Loss of consciousness was not witnessed and the patient did not demonstrate symptoms of amnesia following the accident. The airbags did not deploy. Post injury, the patient reports continuing headaches, memory impairment, anxiety, neck pain, depression, cognitive impairment and sleep disorder. There is no previous history of these symptoms. No cranial nerve abnormalities were noted on examination, but gait abnormalities were seen. The patient did complain of numbness and tingling in her upper extremities.

CLINICAL IMPRESSION: The EEG/ERP Study demonstrates that this patient has significantly impaired brain function with significant impairment of executive function, attention and memory, stimulus evaluation and classification speed, slow reaction times and reduced accuracy of stimulus classification.

These findings and also the presence of both a delayed median reaction time and an asymmetry of P3b amplitude in the parietal region combined with a history of head trauma and/or whiplash are all consistent with traumatic brain injury (TBI).

Based on the available history, this has been present only after the injury on 9/15/2018 and is most likely due to a traumatic brain injury that occurred in the accident on the above-indicated date.

David W. Brandes, MS, MD, FAAN, FAHA

Study Protocol:

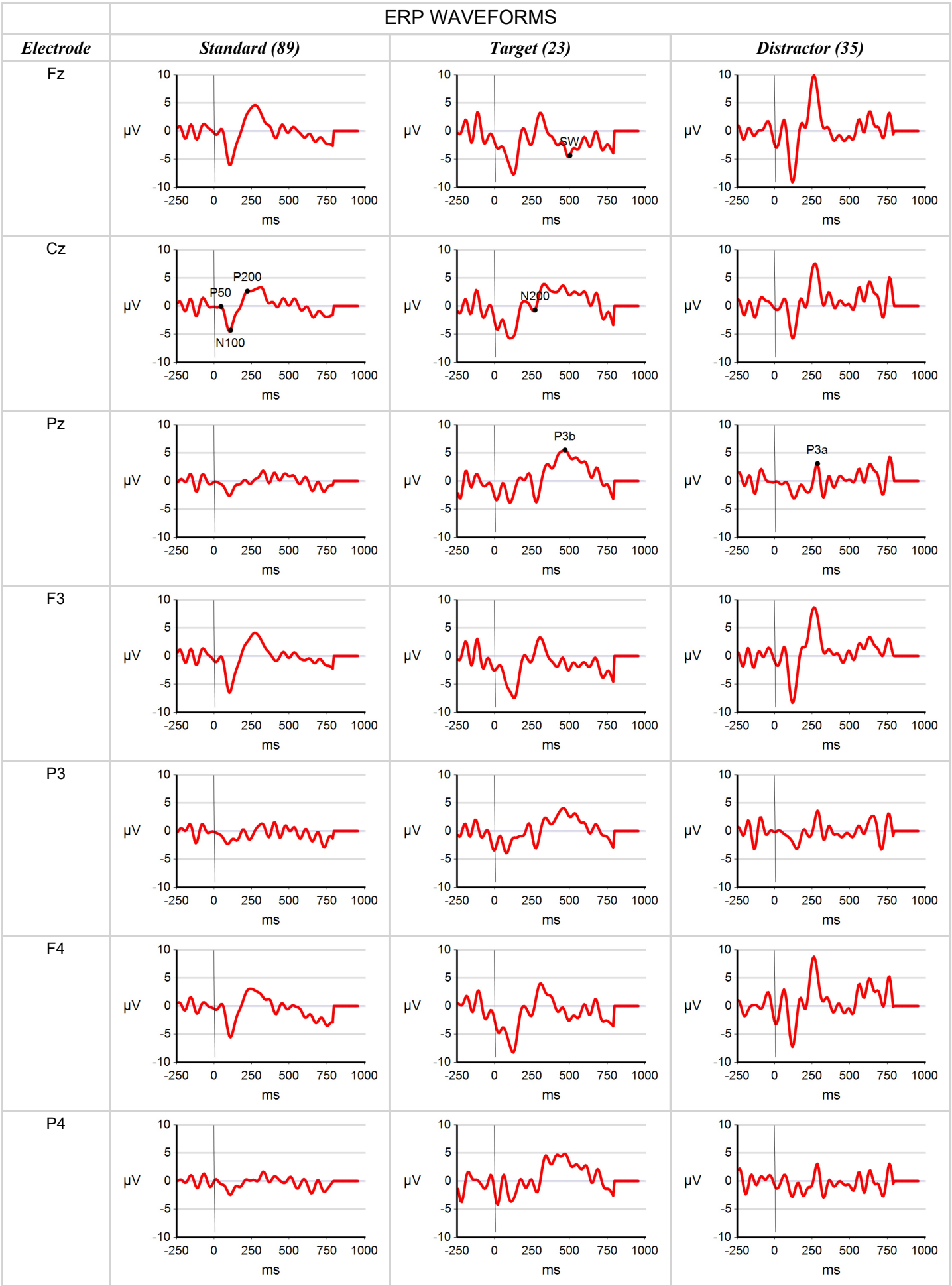
Auditory_Oddball_Active_3_01

Test Name	Test Description	Patient Instructions
Auditory_Oddball_Training_2_01		Press button with your dominant hand (red button for right-handed and blue button for left-handed) when you hear the high-pitched tone.
Auditory_Oddball_Active_3_01		Press button with your dominant hand (red button for right-handed and blue button for left-handed) when you hear the high-pitched tone.
EEG	EEG capture	

Physician/Practice Information: <div></div> Study Technician: <div></div> Treating Physician: <div></div>	Patient Information: Name: <div></div> ID: <div></div> Birth Date: <div></div> Study Information: Order Notes: Date Uploaded: <div></div>
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Test Name:
Auditory_Oddball_Active_3_01

Task Performance				
Feature	Value			
Button Press Accuracy (%)	40.0			
False Alarms (%)	0.9			
Median Reaction Time (ms)	680.0			
ERP Features				
Feature	Stimulus	Amplitude (μV)	Latency (ms)	Avg Amplitude (μV)
P50	Standard	0.26	40.0	-0.56
N100	Standard	-5.10	104.0	-3.16
P200	Standard	2.48	217.1	0.91
N200	Target	-2.39	268.0	-0.26
P3b	Target	2.91	462.7	1.49
SW	Target	-1.08	499.2	0.80
P3a	Distractor	4.32	284.0	1.08



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Test Name:
EEG

EEG FEATURES		
<i>Feature</i>	<i>Peak Frequency</i>	<i>Power</i>
Peak Alpha	11.11	40.1

