

RONEP FOUNDATION
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PATIENT'S NAME: Anghelina Maia

PERFORMANCE DATE: 05/09/2018

DATE OF BIRTH: 27/04/2018

DIAGNOSIS: paroxysmal manifestations when awake, started about 1 month ago, with bilateral right / left clonic movements, predominantly before sleep, no regression

Treatment: none

PHYSICIAN: Dr. Lucica Ghita

TRACE INTERPRETATION

PROLONGED VIDEO EEG MONITORING: approximately 2 hours and 30 minutes, wake and sleep, recording with 21 cephalic electrodes (headpiece with included electrodes), ECG and EMG line (left deltoid, then distal right).

WAKE EEG TRACE: the initiation of the recording is done exactly during a paroxysmal wake-up occurring after the headpiece has been fitted during the installation of the additional electrodes; the girl shows a paroxysmal manifestation with fine bilateral clonic movements that is only partially covered by the recording of EEG (not video, but it is similar to what parents have recorded at home). At the same time, on the EEG trace, towards the end of the manifestation, are seen rhythmic sharp elements, bilateral posterior overlapping with the movement artifacts, as well as wave peak-type changes in the previous bilateral derivations (detectable left, central derivations, also possibly right but artifactated by motion and positioning); duration of the electroencephalographically detected manifestation is about 1 min. Subsequently, the basic rhythm is resumed, in the theta band, relatively symmetric bilaterally, the mean frequency approx. 5 c/sec, mean amplitude approx. 70 uV, broader in bilateral posterior. Spontaneously, are noticed peak discharges in the wake trace, slow waves in the right posterior derivations, maximum amplitude O2, with left posterior inconsistent irradiation. Sucking and motion artifacts.

SLEEP EEG TRACE: Sleep occurs relatively quickly after recording initiation, at breast, in 2 rounds. Sleep staging is difficult to differentiate, the traces with slow wave strings in the delta band, predominantly posterior alternate with trace portions where sleep elements can be observed: vertex peaks sketches and strings of sleep axes, predominantly central, asynchronous between the two hemispheres (physiologically at this age). Asymmetry of the background trace with slower waves in the right posterior derivations. Inconstantly we notice sharp elements in the bilateral central derivations, with different morphology from that of sleep axes. During the sleep, the girl shows paroxysmal manifestations with the following appearance:

- Paroxysmal manifestations resembling startling - with flattening of the EEG trace, no EMG correspondent
- Paroxysmal manifestations with fine distal clonic movements, hand/foot, right or left - without recording changes in the background rhythm

- Paroxysmal manifestations in which the eyes are open, then abrupt limb movements (arrhythmic), lasting a few seconds - on the EEG trace - strings of sharp elements, predominantly central derivations
- CONCLUSION: wake and sleep EEG trace with abnormal architecture for this age, with an epilepsy-like focal point at the level of the right hemisphere, posterior, with some tendency to sleep fragmentation and with the observation of paroxysmal manifestations with variable appearance, some with EEG correspondence. It requires clinical - imaging correlation - possible structural cause?

Dr Carmen Sandu [signature]

EEG competency