

The adaptability of health care professionals to the new neonatal seizure classification: ILAE-2020

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INTRODUCTON

- Volpe-2001 Classification of Neonatal Seizures is the most well-known-popular classification.
- ILAE-2020 proposed as a new classification for adaptation to ILAE Seizure Classification System.

OBJECTIVES

• This study aimed to evaluate the semiologic adaptability of ILAE's new neonatal seizure classification among health care professionals (HCP) (pediatric residents, neonatologists, pediatric neurologists, EEG tech, and nurses) with a modular education program (MEP).

MATERIAL & METHODS

- A web-based self education course* will be applied to the HCPs with a MEP consisted of four modules including 80 illustrative videos; the first three modules for the ILAE-2020 and Volpe's-2001 seizure classifications, one module for non-epileptic neonatal paroxysmal events. An instruction manual kit including a seizure determinator and glossary of terms, was also prepared by the advisory board.
- The MEP will be applied to 100 health care professionals with a web-based self-education course program (www.ENEOSS2022).
- The pre-MEP test and post-MEP-1 (at the end of course) test will be applied to the participants.
- The post-MEP-2 test will be carried out after three months using 20 new videos.

Table 1: Modules in the Modular Education Program (MEP)

	Volpe-2001 Neonatal Seizure Clasification (5 clinical event)	ILAE-2020 Neonatal Seizure Clasification (8 clinical event)
MODULE I		I. Focal-motor
	1- Tonic	1- Tonic
	2- Clonic	2- Clonic
	3- Myoclonic	3- Myoclonic
	4- Epileptic Spasms	4- Epileptic Spasms
MODULE II	5- Subtle	5- Automatism
		II. Focal non-motor
		6- Behavioral arrest
		7- Autonomic
MODULE III		8- Sequential seizures
MODULE IV	Non-epileptic neonatal paroxysmal events	

Module I: 4 seizure types (tonic / clonic / myoclonic /epileptic spasms) that are compatible with Volpe & ILAE 2020 classifications will be presented.

Module II: Subtle type seizures in the Volpe classification are sub-classified as *automatisms* / *autonomic seizures* / *behavioral seizures* in ILAE 2020.

Module III: The ILAE-2020 classification introduced a new seizure classification as sequential seizures; describes the presence of consecutive clinical seizures.

Module V: Neonatal Paroxysmal Events (jitteriness, myoclonus), which can be confused with 8 clinical seizures in the ILAE-2020 seizure classification, will be presented in this module and it will be ensured that the participants can distinguish between clinical seizures and NEPs.

EXPECTED RESULTS

The success rate of the MEP modules will be defined for focal motor seizures, focal non-motor seizures, and non-epileptic paroxysmal phenomena.

The possible most commonly confused seizure type in the ILAE 2020 will be discussed.

HYPOTHESIS

Is the ILAE-2020 neonatal seizure classification successfully applicable to the health professionals with a web-based self education course?

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