Clinical commentary

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Stimulus-induced rhythmic, periodic ictal discharges during funduscopic examination in a patient with status epilepticus

Wei-Pin Hong [1,a], Tsang-Shan Chen [2,a], Chin-Wei Huang [3]

[1] Department of Neurology, National Cheng Kung University Hospital, College of Medicine, National Cheng Kung University, Tainan
[2] Department of Neurology, Tainan Hospital, Ministry of Health and Welfare, Tainan
[3] Department of Neurology, Tainan Sin-Lau Hospital, Tainan, Taiwan
[a] Authors contributed equally

Epileptic Disorders

- Stimulus-induced rhythmic, periodic, or ictal discharges (SIRPIDs), an unusual pattern in electroencephalography, have been described in critically-ill encephalopathic patients with alerting stimuli, such as auditory stimuli, sternal rubbing, suction, and turning.
- The phenomenon can be seen in patients with a broad range of aetiologies, including cerebral infarct, haemorrhage, anoxia, traumatic injury, and degenerative diseases.

Hirsch LJ, Claassen J, Mayer SA, *et al.* Stimulus induced rhythmic, periodic, or ictal discharges (SIRPIDs): a common EEG phenomenon in the critically ill. *Epilepsia* 2004; 45: 109-23.

- Most of the stimuli in cases of SIRPIDs are alerting stimuli with rare exceptions, such as during corneal reflex examination (Lin *et al*., 2016) and funduscopic examination in this case.
- The altered neuronal excitability associated with SIRPIDs may be area specific, even in a patient with diffuse encephalopathy.
- Careful clinical-EEG correlation is necessary to recognize these patients.

Lin HJ, Hung TY, Hsieh YJ, *et al.* Spontaneous and stimulus-induced rhythmic periodic or ictal discharges (SIRPIDs) with rhythmic eye blinking and ocular dipping in a post-anoxic comatose patient: a case report. *Neurol Sci* 2016; 37: 2027-30.