

GUIDE TO NEURO CARE

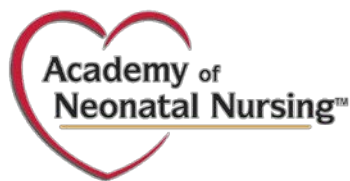
REVIEW QUESTIONS

ADVANCED TOPICS

1. A desirable effect of therapeutic hypothermia for the management of hypoxic-ischemic encephalopathy is:
 - a. Increased production of glutamate
 - b. Decreased cellular metabolism and decreased production of glutamate
 - c. Enhanced apoptosis

2. Advantages of continuous EEG (cEEG) include:
 - a. Direct reflection of brain function over time
 - b. Provides specific information about etiology of seizures to guide management
 - c. Requires minimal expertise for application and analysis

3. Amplitude-integrated EEG (aEEG) is more sensitive and specific than continuous EEG.
 - a. True
 - b. False



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REVIEW QUESTION ANSWERS

ADVANCED TOPICS

1. **Answer: B.** Desirable effects of therapeutic hypothermia relate to decreasing metabolic activity and include decreasing accumulation of glutamate and lactic acid. (Source: Thape J. 2013. Let's be Cool: Hypothermia and Hypoxic Ischemic Encephalopathy; 13th National Neonatal Nurses Conference, recording).

2. **Answer: A.** Continuous EEG (cEEG) is considered the gold standard for seizure diagnosis. By providing direct recording of activity over time (twenty-four hours or longer) it can capture multiple episodes of seizure activity that might be otherwise missed with more episodic recording. cEEG can demonstrate seizures but cannot confirm the etiology; this requires additional testing. It does require expertise with application and analysis (Source: Wusthoff C. 2014. Neurocritical Care Monitoring: aEEG, videoEEG, and Beyond, ANN webinar).

3. **Answer: False.** Continuous EEG is considered the gold standard for seizure diagnosis and is more sensitive and specific than the filtered, smoothed, time-compressed aEEG. Short duration seizures may be missed due to the time-compression of the aEEG (Source: Wusthoff C. 2014. Neurocritical Care Monitoring: aEEG, videoEEG, and Beyond, ANN webinar)