

# CLINICAL PEARLS FOR ROUTINE EEG INTERPRETATION

Katherine Noe, MD, PhD

1. 90% of EEG reading is artifact recognition and knowing the normal back ground.
2. A good EEG technologist will save you a lot of trouble. It is almost impossible for a reader to compensate for a poor quality recording.
3. Be cautious when using non-standard filters and settings – you may distort artifact and normal activity so that it looks epileptiform.
4. Activity limited to a single electrode should be considered artifact until proven otherwise
5. Be wary of over-reading sharps just because you think the patient had a seizure (e.g. don't be overly biased by the clinical history).
6. Know your wickets! Wickets are consistently identified as one of the most commonly misread findings on routine EEGs.
7. Phase reversal  $\neq$  epileptogenic.
8. Epileptiform activity should be distinct from the preceding and following background based on waveform, symmetry, duration, and amplitude. It is not just a higher amplitude wave in a run of similar sinusoidal rhythms.
9. When in doubt, be conservative in your interpretation. Over-reading will almost always do more harm than under-reading.