Old versus New ILAE Seizure Classification: 100 first seizures head to head analysis.

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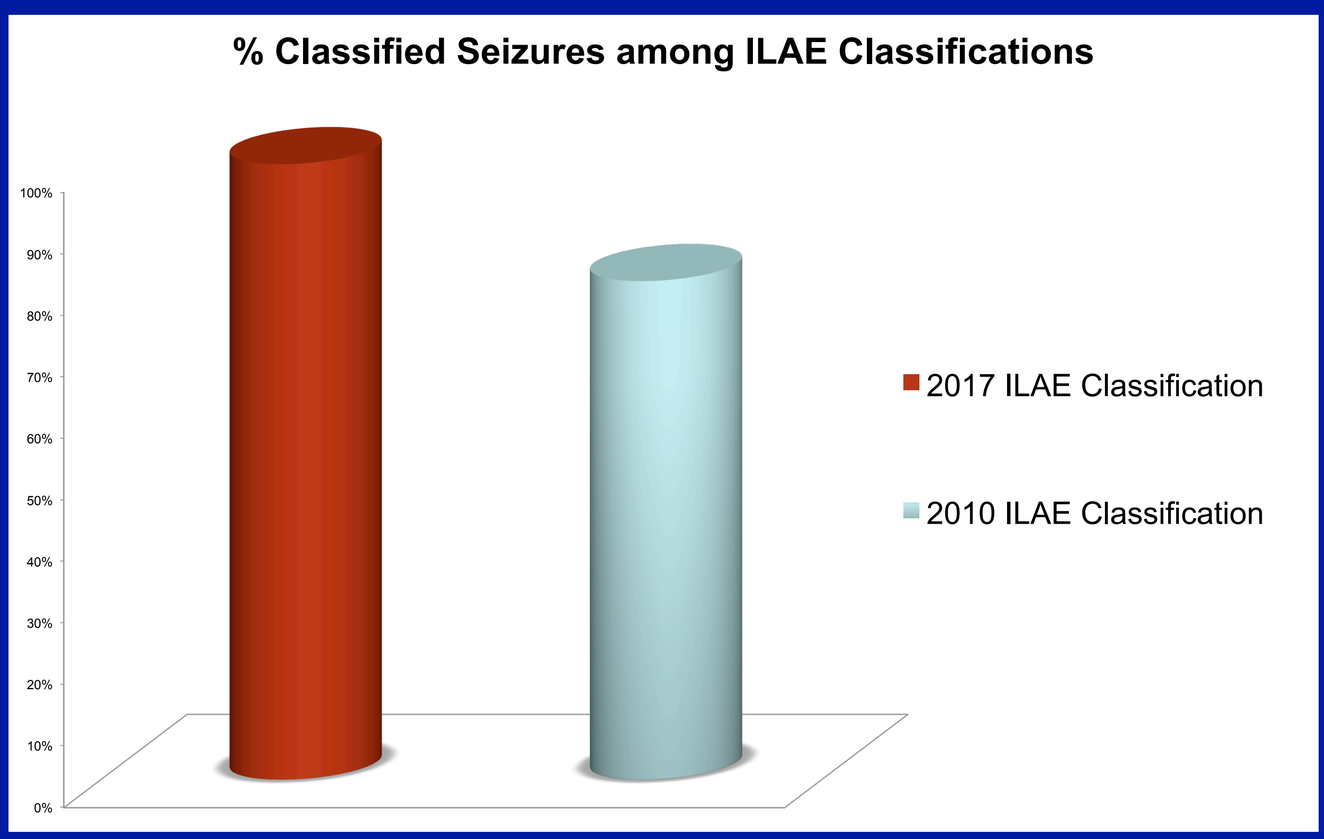
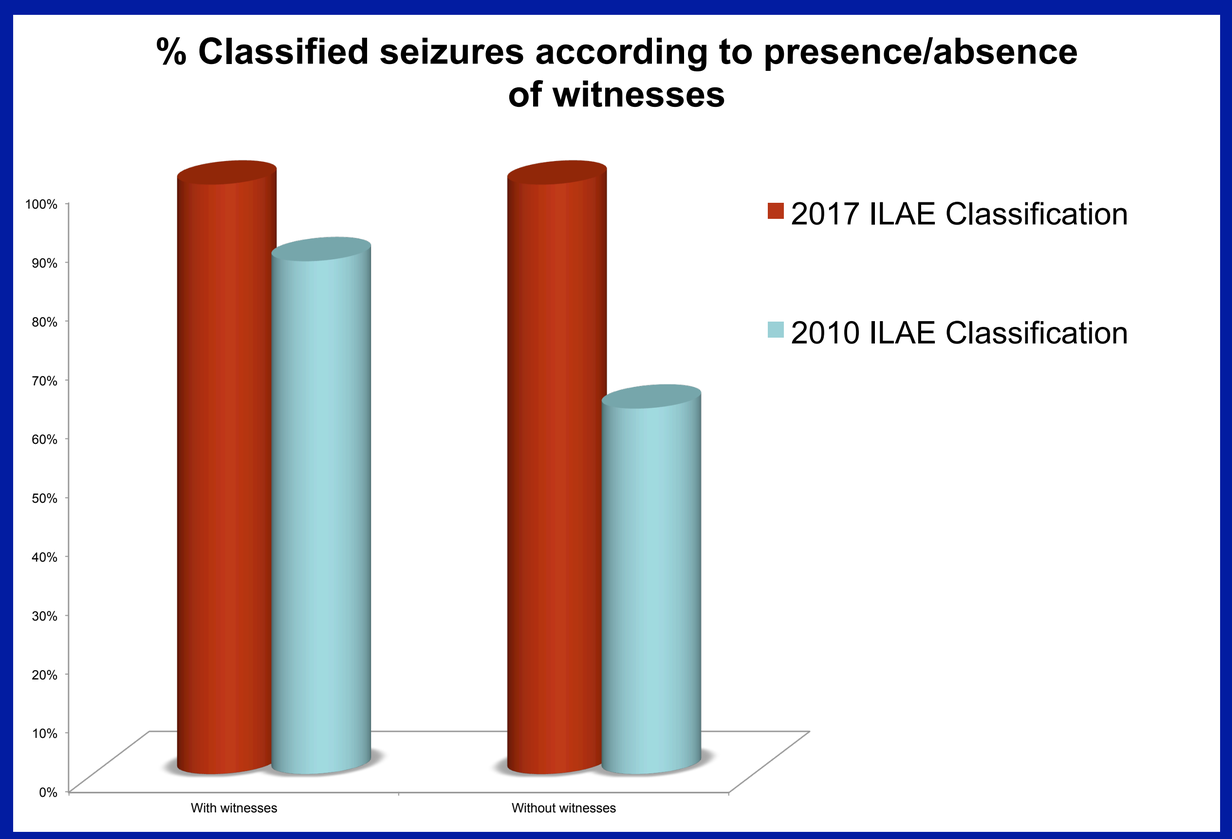
Aims. International League against Epilepsy (ILAE) developed a new classification scheme for seizures in 2017[1]. The aim of the present study is to evaluate the reliability and the usefulness in clinical practice, while assessing and describing a patient's first seizures, comparing the new classification with the old one, released by the ILAE back in 2010[2].

Methods. Clinical data regarding a first seizures for 100 consecutive patients enrolled in Regional Epilepsy Center, Reggio Calabria, in 2016, has been retrospectively analyzed. We analyzed seizures semiology and then we assessed the number of seizure fully classified by each classification scheme. Moreover, we evaluated how some variables, such as the presence of witnesses and seizures occurring during sleep, influenced the probability of fully classifying each seizure. Differences among classification schemes were evaluated by Fisher's exact Test.

Results. All sampled seizures (100%) were fully classified by 2017 ILAE seizure classification; 2010 ILAE classification categorized only 81% of our sample seizures ($p<0.001$). Not-fully-classified seizures were all of unknown onset. According to 2010 classification, witnesses' absence were significantly related in failing seizure's categorization (47% versus 23% seizures without witnesses not fully classified by 2010 and 2017 ILAE classification, respectively, $p=0.04$). No differences were assessed between the schemes concerning seizures occurring during wakefulness or sleep (21% vs. 14% seizures not fully classified by 2010 and 2017 ILAE classification, respectively, $p=0.47$).





Discussion and conclusions. Our results highlight the reliability and the usefulness of new ILAE classification compared to the previous one, even if seizure onset is unknown as likely occurring for unwitnessed seizures.

References

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