Berg AT, Kelly M. **Defining intractability: Comparisons among published definitions** Epilepsia 2006;47:431-436.

Summary:

Purpose: Intractable epilepsy is the focus of much research; however, this concept is defined in no single way. Individual studies use different definitions, creating difficulties for comparisons of results across studies. A head-to-head comparison of definitions could highlight these differences and motivate the development of consensus guidelines.

Methods: Within a single prospective study of 613 children in Connecticut with newly diagnosed epilepsy (1993–1997), six different published definitions or indicators for intractability were applied and compared. All definitions were assessed at various times within the first 5 years after diagnosis, with the exact timing reflecting how they were used in their initial reports. Observed and chance-adjusted agreement (kappa) were computed. The associations of each definition with remission status 7–10 years after diagnosis were quantified with a relative risk.

Results: Depending on the specific definition, the epilepsy of 9–24% of children was considered intractable. Observed agreements among the definitions ranged from a low of 0.83 to a high of 0.96. Kappas ranged from low of 0.45 to 0.79. More similar definitions had higher levels of agreement. All definitions were strongly associated with remission status as of last follow-up.

Conclusions: Agreement among the different definitions is strong but imperfect. All definitions were significantly associated with longer-term outcome. No single preferred definition of intractable epilepsy exists. Some discussion within the field of epilepsy and a consensus process should be considered as a future step for enhancing comparability of research efforts and clinical guidelines. Consideration should be given to whether a single definition will suit all purposes or whether different types of definitions are needed for different purposes.