## TRY A THIRD DRUG? YES, YOU SHOULD IN MOST CASES.

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It is often thought that patients with epilepsy are unlikely to ever respond to drug treatment if they have not done so within two drugs or within a few years of treatment. The evidence for this rather pessimistic view is a retrospective study from Scotland. Kwan and Brodie (2000) in a large study of patients evaluated and treated in Glasgow, Scotland, found that of 470 patients who had never before received an AED, 301 (64%) became seizure-free for at least 12 months during treatment. Of these patients 113 discontinued the first drug because of lack of efficacy; 69 because of intolerable side effects; 29 because of idiosyncratic reactions; and 37 for other reasons. Only 79 of these 248 patients (32%) subsequently became seizure-free. The outcome among these patients was strongly associated with the reason for the failure of treatment with the first drug. Another 12 (11%) of the patients in whom treatment with the first drug was ineffective subsequently became seizure-free. Only 4% adequately responded to a third drug. Similarly, only 3% of patients responded to two drugs. More recent studies have however given a much more optimistic assessment. Several retrospective studies concluded that improved epilepsy control can be achieved by changing the drug regimen, even in patients who have not responded to several previous AED treatments. For example, Luciano and Shorvon (2007) showed that a introduction of another drug in patients who had taken a mean of 5.8 AEDs resulted in seizure freedom in 43 of 155 patients (28%), and 56 patients (36%) obtained a 50-99% reduction in seizures. Similarly, a survey of patients from one center indicated that eve after 5 AEDs did not control seizures, subsequent change of s resulted in seizure control in as many as 15% of patients (MacCabe et al 2006). Finally, several recent studies, have indicated that patient might move in and out of refractory epilepsy as their disease progresses, including a sizable proportion of patients that do better in the course of their disorder (Sillanpää and Schmidt, 2006, Berg et al 2006). In conclusion, trying a third, fourth and fifth or sixth drug may be very worthwhile. Thus, appropriate aggressive AED treatment of uncontrolled seizures seems to be warranted even in patients who have not fully responded to two AEDS.