

P.E.A.R.L.S. Practical Evidence About Real Life Situations



Is routine therapeutic monitoring of antiepileptic drugs for epilepsy necessary

Clinical Question	Should I routinely measure serum drug concentrations in my patients who are taking anti-epileptics?
Bottom Line	Routine measurement of serum drug concentrations to inform drug dose adjustments is no better than drug dose adjustments made on clinical grounds alone in newly-diagnosed epilepsy patients treated with a single drug: carbamazepine, valproate, phenytoin, phenobarbital or primidone.
Context	A GP with 2,000 patients may expect 1-2 new cases of epilepsy annually, 10-15 patients with epilepsy consulting and another 40-50 persons with a past history but no current problems.
Caveat	Therapeutic drug monitoring of specific anti-epileptics during polytherapy, in special situations or in selected patients may be useful, although evidence is lacking. i.e toxicity concerns
Reference	Tomson et al. Therapeutic monitoring of antiepileptic drugs for epilepsy. Cochrane Reviews, 2007, Issue 1. This review contains 1 study with 180 participants.
Date (Author)	Feb 2007 (Brian R McAvoy)

NNT = numbers needed to treat to benefit one person

NNH = numbers needed to harm one person

Both NNT and NNH are only reported if the studies or pooling of studies is statistically significant

Disclaimer : The P.E.A.R.L.S. are for educational use only and are not meant to guide clinical activity nor are they a clinical guideline