



**Is routine therapeutic monitoring of antiepileptic drugs for newly diagnosed patients necessary?**

**Clinical question** Should I routinely measure serum drug concentrations in newly diagnosed patients who are taking antiepileptic monotherapy?

**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 patients with epilepsy treated with a single drug: carbamazepine, valproate, phenytoin, phenobarbital or primidone.

**Caveat** Fifty six per cent of the intervention group and 55 per cent of the controls were treated with carbamazepine. Therapeutic drug monitoring of specific antiepileptic drugs during polytherapy, in special situations or in selected patients may be useful (eg, toxicity concerns), although evidence is lacking.

**Context** A GP with 2000 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.

**Cochrane Systematic Review** Tomson et al. Therapeutic monitoring of antiepileptic drugs for epilepsy. Cochrane Reviews 2007, Issue 1, Article No. CD002216.

*Note: this review contains only one study with 180 participants.*

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