

## Seizures and epilepsy in the elderly: Management

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The decision to initiate long-term antiepileptic drug (AED) treatment in elderly with new onset seizures should be based on a careful risk:benefit assessment.<sup>1</sup> Recent long-term outcome data suggest that elderly generally respond well to AED therapy.<sup>2</sup> Although partial seizures are the most prevalent seizure type in the elderly, idiopathic generalised epilepsies can also develop in this age group.<sup>3</sup> AEDs with broad spectrum of activity may be advantageous when accurate classification is not possible, particularly at initial presentation.

Since the elderly are particularly sensitive to neurotoxic side effects, tolerability profile is of paramount importance in drug selection. AEDs with a high propensity for adverse cognitive and behavioural effects should be avoided in elderly with dementia and psychiatric illness.<sup>4</sup> Attention should be paid to the potential effects of AEDs on bone health in a population at high risk of osteoporosis.<sup>5</sup> AEDs with low potential of drug-drug interactions are preferred since many elderly patients are taking concomitant medications, often in large numbers.<sup>6</sup> Pharmacokinetics of AEDs in the elderly is further affected by age-related changes in absorption, protein binding, hepatic metabolism, and renal clearance.<sup>2,7</sup> These changes may lead to considerable variability in total serum drug concentration, rendering a single measurement a poor guide to dosing.<sup>8</sup>

There is a dearth of AED trials specifically performed in the elderly. Lamotrigine has been found to have similar efficacy but better tolerability compared with carbamazepine in both double-blind and open-label randomised studies.<sup>9</sup> The recently completed Veterans Affairs study

randomised elderly with newly diagnosed partial epilepsy to carbamazepine, lamotrigine and gabapentin.<sup>10</sup> The final results of the study are pending. Data on the effectiveness of epilepsy surgery or vagal nerve stimulation in the elderly is even more limited.

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