

17 - Interactions of antiseizure medications²²

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Drug treatment of psychiatric symptoms in the context of other conditions CHAPTER 10

Interactions of antiseizure medications²² Pharmacokinetic interactions Important pharmacokinetic interactions occur in both directions between antiseizure medications and psychotropics, primarily mediated through cytochrome enzymes.^{9,23} Psychotropics with enzyme-inhibiting effects (e.g. fluoxetine, fluvoxamine, paroxetine and, at higher doses, sertraline) may increase antiseizure plasma levels. This is especially relevant to antiseizure medications with a narrow therapeutic index (e.g. carbamazepine and phenytoin). Plasma levels should be monitored, and dosage adjustment may be required. Citalopram and escitalopram are very weak inhibitors of CYP1A2 and CYP2D6, and so may be preferred in some cases. Some antiseizure medications are potent enzyme inducers (e.g. phenytoin, carbamazepine, phenobarbital, primidone) and others are weak inducers (e.g. oxcarbazepine at doses $\geq 900\text{mg/day}$, topiramate at doses $\geq 400\text{mg/day}$). These drugs can lower plasma levels of many psychotropics, leading to treatment failure.

Antiseizure medication Adverse psychiatric symptoms Psychiatric benefits

Ethosuximide	Behavioural disturbance, depression, psychosis	None reported
Felbamate	Anxiety, depression	None reported
Gabapentin, pregabalin	Depression and anxiety on cessation	Anxiolytic
Lacosamide	None reported	None reported
Lamotrigine	Anxiogenic in some. Behavioural disturbance in cognitive impairment	Antidepressant, mood stabilising
Levetiracetam	Anxiety, behavioural disturbance, depression, suicidality	None confirmed
Perampanel	Behavioural disturbance, depression, psychosis	None reported
Phenytoin	Behavioural disturbance, depression	Anti-manic
Rufinamide	Anxiety, insomnia	None reported
Tiagabine	Behavioural disturbance, depression	Anxiolytic
Topiramate	Anxiety, behavioural disturbance, depression, psychosis	Unclear. Possible anti-manic/antipsychotic
Valproate	Behavioural disturbance (at high doses in children)	Mood stabilising, anti-manic, anti-panic
Vigabatrin	Behavioural disturbance/ADHD symptoms, depression, psychosis	None reported
Zonisamide	Behavioural disturbance, depression	None confirmed

Table 10.4 (Continued)

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