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References

298 The Maudsley® Prescribing Guidelines in Psychiatry CHAPTER 2 resulting in treatment failure. Patients requiring contraception should either receive a preparation containing not less than 50mcg oestrogen or use a non-hormonal method. Drugs that inhibit CYP3A4 will increase carbamazepine plasma levels and may precipitate toxicity. Examples include fluconazole, cimetidine, diltiazem, verapamil, erythromycin and some SSRIs. Pharmacodynamic interactions also occur. The antiseizure activity of carbamazepine is reduced by drugs that lower the seizure threshold (e.g. antipsychotics and antidepressants); the potential for carbamazepine to cause neutropenia may be increased by other drugs that depress the bone marrow function (e.g. clozapine); and the risk of hyponatraemia may be increased by other drugs that have the potential to deplete sodium (e.g. diuretics). Neurotoxicity has very rarely been reported when carbamazepine is used in combination with lithium. As carbamazepine is structurally similar to TCAs, in theory it should not be given within 14 days of discontinuing a monoamine oxidase inhibitor (MAOI). There seems to be no clinical basis to this restriction. Table 2.4 summarises the prescribing and monitoring of carbamazepine. References

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3. Weisler RH, et al. Extended-release carbamazepine capsules as monotherapy for acute mania in bipolar disorder: a multicenter, randomized, double-blind, placebo-controlled trial. *J Clin Psychiatry* 2005; 66:323-330.
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5. National Institute for Health and Care Excellence. Bipolar disorder: assessment and management. Clinical guideline [CG185]. 2014 (last updated December 2023, last accessed October 2024); <https://www.nice.org.uk/guidance/cg185>.
6. Vasudev A, et al. Oxcarbazepine for acute affective episodes in bipolar disorder. *Cochrane Database Syst Rev* 2011; 12:CD004857.
7. Grunze A, et al. Efficacy of carbamazepine and its derivatives in the treatment of bipolar disorder. *Medicina (Kaunas)* 2021; 57:433. Table 2.4 Carbamazepine: prescribing and monitoring. Indications Mania (not first line), bipolar depression (evidence weak), unipolar depression (evidence weak) and prophylaxis of bipolar disorder (third line after

antipsychotics and valproate). Alcohol withdrawal (may be poorly tolerated).

Carbamazepine is licensed for the treatment of bipolar illness in patients who do not respond to lithium. Pre-carbamazepine work-up U&Es, FBC and LFTs. Baseline measure of weight desirable. HLA genotyping. CYP3A4 genotyping. Prescribing Titrate dose upwards against response and adverse effects; start with 100–200mg twice a day and aim for 400mg twice a day (some patients will require higher doses). The modified-release formulation (Tegretol Retard) can be given once to twice daily, is associated with less severe fluctuations in serum levels and is generally better tolerated. Plasma levels can be used to assure adequate dosing and treatment compliance. Blood should be taken immediately before the next dose. Carbamazepine induces its own metabolism. Blood levels should be re-checked 2 weeks after an increase in dose. Monitoring U&Es, FBC and LFTs yearly and when clinically indicated. Weight (or body mass index). Stopping Reduce slowly over at least 1 month, preferably longer. Hyperbolic tapering has theoretical support.

Bipolar disorder CHAPTER 2 8. Kishi T, et al. Pharmacological treatment for bipolar mania: a systematic review and network meta-analysis of double-blind randomized controlled trials. *Mol Psychiatry* 2022; 27:1136–1144. 9. Hong Y, et al. A cumulative Bayesian network meta-analysis on the comparative efficacy of pharmacotherapies for mania over the last 40 years. *Psychopharmacology (Berl)* 2022; 239:3367–3375. 10. Dilsaver SC, et al. Treatment of bipolar depression with carbamazepine: results of an open study. *Biol Psychiatry* 1996; 40:935–937. 11. Zhang ZJ, et al. The effectiveness of carbamazepine in unipolar depression: a double-blind, randomized, placebo-controlled study. *J Affect Disord* 2008; 109:91–97. 12. Kramlinger KG, et al. The addition of lithium to carbamazepine. Antidepressant efficacy in treatment-resistant depression. *Arch Gen Psychiatry* 1989; 46:794–800. 13. Nasrallah HA, et al. Carbamazepine and valproate for the treatment of bipolar disorder: a review of the literature. *J Affect Disord* 2006; 95:69–78. 14. Ceron-Litvoc D, et al. Comparison of carbamazepine and lithium in treatment of bipolar disorder: a systematic review of randomized controlled trials. *Hum Psychopharmacol* 2009; 24:19–28. 15. Kleindienst N, et al. Differential efficacy of lithium and carbamazepine in the prophylaxis of bipolar disorder: results of the MAP study. *Neuropsychobiology* 2000; 42 Suppl 1:2–10. 16. Yerevanian BI, et al. Bipolar pharmacotherapy and suicidal behavior. Part I: Lithium, divalproex and carbamazepine. *J Affect Disord* 2007; 103:5–11. 17. Tsai CJ, et al. The rapid suicide protection of mood stabilizers on patients with bipolar disorder: a nationwide observational cohort study in Taiwan. *J Affect Disord* 2016; 196:71–77. 18. Peselow ED, et al. Prophylactic efficacy of lithium, valproic acid, and carbamazepine in the maintenance phase of bipolar disorder: a naturalistic study. *Int Clin Psychopharmacol* 2016; 31:218–223. 19. Vieta E, et al. A double-blind, randomized, placebo-controlled prophylaxis trial of oxcarbazepine as adjunctive treatment to lithium in the long-term treatment of bipolar I and II disorder. *Int J Neuropsychopharmacol* 2008; 11:445–452. 20. Conway CR, et al. An open-label trial of adjunctive oxcarbazepine for bipolar disorder. *J Clin Psychopharmacol* 2006; 26:95–97. 21. Juruena MF, et al. Bipolar I and II disorder residual symptoms: oxcarbazepine and carbamazepine as add-on treatment to lithium in a double-blind, randomized trial. *Prog Neuropsychopharmacol Biol Psychiatry* 2009; 33:94–99. 22. Malcolm R, et al. The effects of carbamazepine and lorazepam on single versus multiple previous alcohol withdrawals in an outpatient randomized trial. *J Gen Intern Med* 2002; 17:349–355. 23. Minozzi S, et al. Anticonvulsants for alcohol withdrawal. *Cochrane Database Syst Rev* 2010; 3:CD005064. 24. Brieden T, et al. Psychopharmacological treatment of aggression in schizophrenic patients. *Pharmacopsychiatry* 2002; 35:83–89. 25. Taylor D, et al. Doses of carbamazepine and valproate in

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