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References

Drug treatment of psychiatric symptoms in the context of other conditions CHAPTER 10 Epilepsy and driving In the UK, people with epilepsy may not drive a car if they have had a seizure while awake in the previous year. However, they may be eligible to drive if seizures occur only during sleep and this has been an established nocturnal pattern for at least 3 years. The consequences of inducing seizure with antidepressants or antipsychotics can therefore be significant. For further information see <https://www.gov.uk/epilepsy-and-driving>. Other countries have different rules, but most require a seizure-free period of between 6 and 36 months. 71 References

1. Scott AJ, et al. Anxiety and depressive disorders in people with epilepsy: a meta-analysis. *Epilepsia* 2017; 58:973-982.
2. Clancy MJ, et al. The prevalence of psychosis in epilepsy; a systematic review and meta-analysis. *BMC Psychiatry* 2014; 14:75.
3. Wang H, et al. Suicidality and epilepsy: a systematic review and meta-analysis. *Front Psychiatry* 2023; 14:1097516.
4. Thurman DJ, et al. The burden of premature mortality of epilepsy in high-income countries: a systematic review from the Mortality Task Force of the International League Against Epilepsy. *Epilepsia* 2017; 58:17-26.
5. Kanner AM. Management of psychiatric and neurological comorbidities in epilepsy. *Nat Rev Neurol* 2016; 12:106-116.
6. Hesdorffer DC. Comorbidity between neurological illness and psychiatric disorders. *CNS Spectr* 2016; 21:230-238.
7. Hesdorffer DC, et al. Occurrence and recurrence of attempted suicide among people with epilepsy. *JAMA Psychiatry* 2016; 73:80-86.
8. Kanner AM. Can neurochemical changes of mood disorders explain the increase risk of epilepsy or its worse seizure control? *Neurochem Res* 2017; 42:2071-2076.
9. Curran S, et al. Selecting an antidepressant for use in a patient with epilepsy. Safety considerations. *Drug Saf* 1998; 18:125-133.
10. Blumer D, et al. Treatment of the interictal psychoses. *J Clin Psychiatry* 2000; 61:110-122.
11. Mula M. The pharmacological management of psychiatric comorbidities in patients with epilepsy. *Pharmacol Res* 2016; 107:147-153.
12. Elger CE, et al. Diagnosing and treating depression in epilepsy. *Seizure* 2017; 44:184-193.
13. Anbarasan D. Psychoactive medications and seizures—challenges and pitfalls. *Neurol Rep* 2016; 9:24-27.
14. Kanner AM. Most antidepressant drugs are safe for patients with epilepsy at therapeutic doses: a review of the evidence. *Epilepsy Behav* 2016; 61:282-286.

15. Kerr MP, et al. International consensus clinical practice statements for the treatment of neuropsychiatric conditions associated with epilepsy. *Epilepsia* 2011; 52:2133–2138.
16. Josephson CB, et al. Psychiatric comorbidities in epilepsy. *Int Rev Psychiatry* 2017; 29:409–424.
17. Maguire M, et al. Epilepsy and psychosis: a practical approach. *Pract Neurol* 2018; 18:106–114.
18. Mula M. *Neuropsychiatric Symptoms of Epilepsy*. Basel: Springer International Publishing; 2016.
19. Villanueva V, et al. Proposed recommendations for the management of depression in adults with epilepsy: an expert consensus. *Neurol Ther* 2023; 12:479–503. Table 10.5 (Continued) Safety in epilepsy Drug Comments Probably low risk^{64,65} – use with caution (limited data) Amfetamines Data are limited to one small retrospective study in PWE.¹¹ No patients who had well-controlled epilepsy experienced an increase in seizure frequency.⁶⁶ Dexamfetamine was historically used as an adjunctive antiseizure agent.⁶⁷ Atomoxetine Data are limited to one small retrospective study in PWE.¹¹ Discontinuation rates were high (though none due to seizure exacerbation⁶⁸). Seizure rate similar to placebo for patients without epilepsy.⁶⁹ Low risk Acetylcholinesterase inhibitors: donepezil/ rivastigmine/ galantamine No increased risk of seizures has been observed.⁷⁰ This table contains information about the proconvulsive effects of antidepressants and antipsychotics when used in therapeutic doses. See Chapter 13 for information about supratherapeutic doses. EEG, electroencephalogram; MAOIs, monoamine oxidase inhibitors; PWE, people with epilepsy; TCAs, tricyclic antidepressants.

818 The Maudsley® Prescribing Guidelines in Psychiatry CHAPTER 10 20. Schmidt D, et al. Drug treatment of epilepsy in adults. *BMJ* 2014; 348:g254. 21. Piedad J, et al. Beneficial and adverse psychotropic effects of antiepileptic drugs in patients with epilepsy: a summary of prevalence, - underlying mechanisms and data limitations. *CNS Drugs* 2012; 26:319–335. 22. Spina E, et al. Clinically significant pharmacokinetic drug interactions of antiepileptic drugs with new antidepressants and new antipsychotics. *Pharmacol Res* 2016; 106:72–86. 23. Harden CL, et al. Mood disorders in patients with epilepsy: epidemiology and management. *CNS Drugs* 2002; 16:291–302. 24. Ngugi AK, et al. Incidence of epilepsy: a systematic review and meta-analysis. *Neurology* 2011; 77:1005–1012. 25. Wigglesworth S, et al. The incidence and prevalence of epilepsy in the United Kingdom 2013–2018: a retrospective cohort study of UK primary care data. *Seizure* 2023; 105:37–42. 26. Alper K, et al. Seizure incidence in psychopharmacological clinical trials: an analysis of Food and Drug Administration (FDA) summary basis of approval reports. *Biol Psychiatry* 2007; 62:345–354. 27. Wu CS, et al. Seizure risk associated with antidepressant treatment among patients with depressive disorders: a population-based case- crossover study. *J Clin Psychiatry* 2017; 78:e1226–e1232. 28. Josephson CB, et al. Association of depression and treated depression with epilepsy and seizure outcomes: a multicohort analysis. *JAMA Neurol* 2017; 74:533–539. 29. Farooq S, et al. Interventions for psychotic symptoms concomitant with epilepsy. *Cochrane Database Syst Rev* 2015; 12:CD006118. 30. Maguire MJ, et al. Antidepressants for people with epilepsy and depression. *Cochrane Database Syst Rev* 2014; 4:CD010682. 31. Maramattom BV. Duloxetine-induced syndrome of inappropriate antidiuretic hormone secretion and seizures. *Neurology* 2006; 66:773–774. 32. Ray AK. Does electroconvulsive therapy cause epilepsy? *J ECT* 2013; 29:201–205. 33. Tallarico M, et al. Antidepressant drugs for seizures and epilepsy: where do we stand? *Curr Neuropharmacol* 2023; 21:1691–1713. 34. Steinert T, et al. [Epileptic seizures

during treatment with antidepressants and neuroleptics]. *Fortschr Neurol Psychiatr* 2011; 79:138–143. 35. Mula M. Epilepsy and psychiatric comorbidities: drug selection. *Curr Treat Options Neurol* 2017; 19:44. 36. National Institute for Health and Care Excellence. Depression in adults with a chronic physical health problem: recognition and management. Clinical Guidance [CG91] 2009 (last updated and checked May 2024); <http://www.nice.org.uk/CG91>. 37. Steinert T, et al. Epileptic seizures under antidepressive drug treatment: systematic review. *Pharmacopsychiatry* 2018; 51:121–135. 38. Finkelstein Y, et al. Second-generation anti-depressants and risk of new-onset seizures in the elderly. *Clin Toxicol (Phila)* 2018; 56:1179–1184. 39. Gilliam FG, et al. A trial of sertraline or cognitive behavior therapy for depression in epilepsy. *Ann Neurol* 2019; 86:552–560. 40. Craig DP, et al. Risk of seizures with antidepressants: what is the evidence? *Drug Ther Bull* 2020; 58:137–140. 41. Servier Laboratories Limited. Summary of product characteristics. Valdoxan (agomelatine). 2021 (last accessed May 2024); <https://www.medicines.org.uk/emc/medicine/21830>. 42. Kuhn KU, et al. Antidepressive treatment in patients with temporal lobe epilepsy and major depression: a prospective study with three different antidepressants. *Epilepsy Behav* 2003; 4:674–679. 43. Lundbeck Limited. Summary of product characteristics. Brintellix (vortioxetine) tablets 5, 10 and 20mg. 2024 (last checked May 2024); <https://www.medicines.org.uk/emc/medicine/30904>. 44. Siwek M, et al. Case report: vortioxetine in the treatment of depressive symptoms in patients with epilepsy – case series. *Front Pharmacol* 2022; 13:852042. 45. Bojja SL, et al. What is the role of lithium in epilepsy? *Curr Neuropharmacol* 2022; 20:1850–1864. 46. Knott S, et al. Epilepsy and bipolar disorder. *Epilepsy Behav* 2015; 52:267–274. 47. Johannessen Landmark C, et al. Proconvulsant effects of antidepressants – what is the current evidence? *Epilepsy Behav* 2016; 61:287–291. 48. Chu C-S, et al. Antidepressant drugs use and epilepsy risk: a nationwide nested case-control study. *Epilepsy Behav* 2023; 140:109102. 49. Elnazer H, et al. Managing aggression in epilepsy. *BJPsych Advances* 2017; 23:253. 50. Steinert T, et al. Seizures. In: Manu P, Flanagan RJ, Donaldson K, eds. *Life-threatening Effects of Antipsychotic Drugs*. San Diego, CA: Academic Press; 2016:207–222. 51. Agrawal N, et al. Treatment of psychoses in patients with epilepsy: an update. *Ther Adv Psychopharmacol* 2019; 9:2045125319862968. 52. Gonzalez-Heydrich J, et al. No seizure exacerbation from risperidone in youth with comorbid epilepsy and psychiatric disorders: a case series. *J Child Adolesc Psychopharmacol* 2004; 14:295–310. 53. IBM Watson Health. IBM micromedex solutions. 2024; <https://www.ibm.com/watson-health/about/micromedex>. 54. Jackson A, et al. EEG changes in patients on antipsychotic therapy: a systematic review. *Epilepsy Behav* 2019; 95:1–9. 55. Qiu X, et al. Antiepileptic effect of olanzapine in epilepsy patients with atypical depressive comorbidity. *Epileptic Disord* 2018; 20:225–231. 56. Mansoor M, et al. Generalised tonic-clonic seizures on the subtherapeutic dose of olanzapine. *BMJ Case Rep* 2019; 12:e230018. 57. Langosch JM, et al. Epilepsy, psychosis and clozapine. *Hum Psychopharmacol* 2002; 17:115–119. 58. Jette Pomerleau V, et al. Clozapine safety and efficacy for interictal psychotic disorder in pharmacoresistant epilepsy. *Cogn Behav Neurol* 2017; 30:73–76. 59. Habibi M, et al. The impact of psychoactive drugs on seizures and antiepileptic drugs. *Curr Neurol Neurosci Rep* 2016; 16:71. 60. Adams J, et al. Methylphenidate, cognition, and epilepsy: a 1-month open-label trial. *Epilepsia* 2017; 58:2124–2132. 61. Adams J, et al. Methylphenidate, cognition, and epilepsy: a double-blind, placebo-controlled, single-dose study. *Neurology* 2017; 88:470–476.

Drug treatment of psychiatric symptoms in the context of other conditions CHAPTER 10 62. Man KKC, et al. Association between methylphenidate treatment and risk of seizure: a population-based, self-controlled case-series study. *Lancet Child Adolesc Health* 2020; 4:435–443. 63. Eaton C, et al. Stimulant and non-stimulant drug therapy for people with attention deficit hyperactivity disorder

and epilepsy. Cochrane Database Syst Rev 2022; 7:CD013136. 64. Besag F, et al. Psychiatric and behavioural disorders in children with epilepsy (ILAE Task Force Report): epilepsy and ADHD. *Epileptic Disord* 2016; 18:S8-S15. 65. Besag F, et al. Psychiatric and behavioural disorders in children with epilepsy (ILAE Task Force Report): when should pharmacotherapy for psychiatric/behavioural disorders in children with epilepsy be prescribed? *Epileptic Disord* 2016; 18:S77-S86. 66. Gonzalez-Heydrich J, et al. Comparing stimulant effects in youth with ADHD symptoms and epilepsy. *Epilepsy Behav* 2014; 36:102-107. 67. Schubert R. Attention deficit disorder and epilepsy. *Pediatr Neurol* 2005; 32:1-10. 68. Torres A, et al. Tolerability of atomoxetine for treatment of pediatric attention-deficit/hyperactivity disorder in the context of epilepsy. *Epilepsy Behav* 2011; 20:95-102. 69. Williams AE, et al. Epilepsy and attention-deficit hyperactivity disorder: links, risks, and challenges. *Neuropsychiatr Dis Treat* 2016; 12:287-296. 70. Ha J, et al. Association of cognitive enhancers and incident seizure risk in dementia: a population-based study. *BMC Geriatr* 2022; 22:480. 71. Ooi WW, et al. International regulations for automobile driving and epilepsy. *J Travel Med* 2006; 7:1-4.

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