



## Appendix A: Medications That Mimic Mood Disorders

| Class                                    | Selected Agents  |
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| Central nervous system (CNS) medications | <ul style="list-style-type: none"> <li>• Anticonvulsants (e.g., barbiturates, vigabatrin, topiramate)</li> <li>• Antiparkinsonian drugs (e.g., levodopa, amantadine)</li> <li>• Anti-migraine agents (e.g., flunarizine)</li> </ul>  |
| Cardiovascular system (CVS) medications  | <ul style="list-style-type: none"> <li>• Beta-blockers* (especially propranolol, metoprolol)</li> <li>• Centrally-acting antihypertensives (e.g., clonidine, methyldopa)</li> <li>• Vasodilators (e.g., hydralazine)</li> <li>• Antiarrhythmics (e.g., amiodarone, digoxin)</li> </ul> |
| Hormonal agents                          | <ul style="list-style-type: none"> <li>• Corticosteroids</li> <li>• Gonadotrophic-releasing hormone agonists (e.g., leuprolide, goserelin)</li> </ul>  |
| Anti-infectives                          | <ul style="list-style-type: none"> <li>• Antiretrovirals (efavirenz)</li> <li>• Interferon-<math>\alpha</math></li> <li>• Antimalarial (mefloquine)</li> </ul>   |
| Miscellaneous                            | <ul style="list-style-type: none"> <li>• Isotretinoin</li> <li>• Clomiphene citrate</li> </ul>   |

\* *Controversy in Care:* <sup>1</sup> a connection between the use of beta-blockers and depression has long been hypothesized, especially propranolol and metoprolol. This association is supported by many case reports and small reviews. However, a meta-analysis and more recent reviews failed to demonstrate this association.

### ► References

1. Celano CM, Freudenreich O, Fernandez-Robles C, et al. Depressogenic effects of medications: a review. *Dialogues Clin Neurosci.* 2011;13:109-25.
2. Whooley MA, Simon GE. Managing depression in medical outpatients. *N Engl J Med.* 2000;343:1942-50.
3. Ko DK, Hebert PR, Coffey CS, et al.  $\beta$ -blocker therapy and symptoms of depression, fatigue, and sexual dysfunction. *JAMA.* 2002;288:351-7.
4. Gerstman BB, Jolson HM, Bauer M, et al. The incidence of depression in new users of beta-blockers and selected antihypertensives. *J Clin Epidemiol.* 1996;49:809-15.
5. Tonstad S, Davies S, Flammer M, et al. Psychiatric adverse events in randomized, double-blind, placebo-controlled clinical trials of varenicline: a pooled analysis. *Drug Saf.* 2010;33:289-301.