trchealthcare

Meds That Can Increase Blood Pressure

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--List not all-inclusive--

Acetaminophen	• Limit to <4 g/day in patients with HTN.[1] • Scheduled doses (1,000 mg PO four times daily for ~2 weeks) in patients with HTN increased SBP ~5 mm Hg vs placebo [Evidence Level B-1].[7] ○ It is unknown if patients without HTN are affected; if lower doses/shorter durations affect BP; if BP elevation persists with long-term use; or if CV risk is affected.[8]
ADHD stimulants (e.g., methylphenidate, amphetamines, atomoxetine[2])	• **Management**: consider dose reduction or switching to a nonstimulant (e.g., clonidine ER [US], guanfacine ER).[1] See our charts, *Comparison of ADHD Medications* (US)(Canada) for help.
Antiandrogens	• Most common with abiraterone, apalutamide, enzalutamide (≥10% incidence).[17]
Bupropion	• Product labeling carries a warning about BP elevation, but data are conflicting.[3,5,6] • BP elevation may be more common when used with nicotine for smoking cessation.[2]
Caffeine	• Limit to <300 mg/day in patients with HTN, or one cup/day if HTN is severe and uncontrolled.[1] • Caffeine intake of about 200 to 300 mg (1 to 2 cups of coffee) may increase SBP by about 8 mm Hg and DBP by about 6 mm Hg.[4] ○ Effects may be more evident within 2 to 3 hours of periodic use, as tolerance to BP elevations seems to occur with regular caffeine intake (e.g., daily coffee).[4]

Calcineurin Inhibitors (cyclosporine, tacrolimus [not topical[2]])	• **Management**. Consider:
	  ○ switching from cyclosporine to tacrolimus (lesser effect on BP).[1]
	  ○ use of a thiazide (monitor for prerenal uremia) or DHP CCB to treat HTN.[12]

CGRP antagonists	• Erenumab (Aimovig)(and possibly other CGRP antagonists) has been associated with new or worsening hypertension.[19] • Onset is often within the first week of treatment.[2]
Clonidine	• Consider clonidine patch over immediate-release oral clonidine due to higher risk of rebound HTN if discontinued without tapering.[1,18] • See our chart, *Common Oral Medications that May Need Tapering* for help
Corticosteroids	• Consider nonsystemic alternative (e.g., topical, inhaled).[1] • Use lowest effective dose for shortest duration necessary.[13] • Consider a diuretic, ACEI, or ARB to treat HTN.[4]
Dietary supplements (e.g., ephedra, black licorice [Glycyrrhiza glabra], blue cohosh [Caulophyllum thalictroides], bitter orange [Citrus aurantium], hoodia [Hoodia gordonii])	• **Management**: discontinue.[1] • See our *NatMed* database for help identifying other supplements' effects on BP.

Erythropoietin	• Common (10% to 20% of patients). Usually starts two weeks to 4 months after starting treatment.[15] May be temporary in some patients.[15]
	• **Management**. Consider:[15]
	  ○ antihypertensive(s).
	  ○ dose reduction or temporary discontinuation.
	  ○ switch from intravenous to subcutaneous route

Estrogen-containing contraceptives	• See our chart, *Choosing a Contraceptive and Emergency Contraception* for information on use in patients with HTN, and alternatives.
Ethanol	• Limit to 1 drink/day for women or 2 drinks/day for men.[1]
Lasmiditan	• BP may transiently increase for one to two hours post-dose.[2]

NSAIDs	• Avoid in patients with HTN, if possible.[1] Consider topical diclofenac instead.[1]
	• **Management**. Consider:
	  ○ dose reduction.[4]
	  ○ switching to celecoxib (lower risk).[9]
	  ○ use of a thiazide or DHP CCB (e.g., amlodipine, felodipine) to treat HTN.[10,11]

Pseudoephedrine	• Limit to shortest duration necessary.[1] • Avoid if HTN is severe or uncontrolled.[1]
Testosterone	• Avoid if HTN is uncontrolled.[2] • Monitor BP in all patients, especially those with HTN.[2] • Topical products have less of an effect on BP than oral or injectable products.[2]
Tizanidine	• Risk of rebound HTN if discontinued without tapering.[1] • Generally reserve for spasticity; consider alternate muscle relaxants (e.g., cyclobenzaprine).[1,14] See our chart, *Muscle Relaxants*, for more alternatives. • See our chart, *Common Oral Medications that May Need Tapering* for tapering help.

VEGF inhibitors (e.g., bevacizumab, sorafenib, sunitinib)	• Risk varies among agents, but is very common, occurs within hours to days, and can be severe.[16]
	• **Management**:
	  ○ Advise patients to monitor BP at home daily during the first cycle or dosage increase, then every two to three weeks.[17]
	  ○ Consider with an ACEIs, ARBs, or DHP CCB to treat HTN.[16]
	  ▪ When VEGF inhibitor treatment is stopped, reduce/stop antihypertensive therapy as appropriate.[17]

Venlafaxine	• May increase DBP by up to 15 mm Hg.[2]
	• **Management**. Consider:
	  ○ dose reduction.[2]
	  ○ switching from immediate-release to extended-release venlafaxine.[3]
	  ○ switching to duloxetine (low risk with therapeutic doses) or SSRI (unlikely to significantly increase blood pressure).[1,3]

Weight Loss Meds (diethylpropion, phentermine)	• Monitor blood pressure.[2] • Avoid in severe hypertension.[2]

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Abbreviations: ADHD = attention deficit hyperactivity disorder; BP = blood pressure; CCB = calcium channel blocker; CGRP = calcitonin gene-related peptide; DBP = diastolic blood pressure; DHP = dihydropyridine; NSAID = nonsteroidal anti-inflammatory drug; MAP = mean arterial pressure; SBP = systolic blood pressure; VEGF = vascular endothelial growth factor

References

1. Jones DW, Ferdinand KC, Taler SJ, et al. 2025 AHA/ACC/AANP/AAPA/ABC/ACCP/ACPM/AGS/AMA/ASPC/NMA/PCNA/SGIM Guideline for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Hypertension. 2025 Aug 14.
2. Clinical Pharmacology powered by ClinicalKey. Tampa (FL): Elsevier. 2025. http://www.clinicalkey.com. (Accessed September 4, 2025).
3. Calvi A, Fischetti I, Verzicco I, et al. Antidepressant Drugs Effects on Blood Pressure. Front Cardiovasc Med. 2021 Aug 3;8:704281.
4. Lovell AR, Ernst ME. Drug-Induced Hypertension: Focus on Mechanisms and Management. Curr Hypertens Rep. 2017 May;19(5):39.
5. Product information for Wellbutrin XL. Bausch Health US. Bridgewater, NJ 08807. March 2024.
6. Product monograph for Wellbutrin XL. Bausch Health, Canada. Laval, QC H7L 4A8. December 2024.
7. MacIntyre IM, Turtle EJ, Farrah TE, et al. Regular Acetaminophen Use and Blood Pressure in People With Hypertension: The PATH-BP Trial. Circulation. 2022 Feb 8;145(6):416-423.
8. Smith SM, Cooper-DeHoff RM. Acetaminophen Induced Hypertension: Where Have All the "Safe" Analgesics Gone? Circulation. 2022 Feb 8;145(6):424-426.
9. Rivasi G, Menale S, Turrin G, et al. The Effects of Pain and Analgesic Medications on Blood Pressure. Curr Hypertens Rep. 2022 Oct;24(10):385-394.
10. Aljadhey H, Tu W, Hansen RA, et al. Comparative effects of non-steroidal anti-inflammatory drugs (NSAIDs) on blood pressure in patients with hypertension. BMC Cardiovasc Disord. 2012 Oct 24;12:93.
11. Morgan T, Anderson A. The effect of nonsteroidal antiinflammatory drugs on blood pressure in patients treated with different antihypertensive drugs. J Clin Hypertens (Greenwich). 2003 Jan-Feb;5(1):53-7.
12. Carey RM, Calhoun DA, Bakris GL, et al. Resistant Hypertension: Detection, Evaluation, and Management: A Scientific Statement From the American Heart Association. Hypertension. 2018 Nov;72(5):e53-e90.
13. Mebrahtu TF, Morgan AW, West RM, et al. Oral glucocorticoids and incidence of hypertension in people with chronic inflammatory diseases: a population-based cohort study. CMAJ. 2020 Mar 23;192(12):E295-E301.
14. Clinical Resource, Muscle Relaxants. Pharmacist's Letter/Pharmacy Technician's Letter/Prescriber Insights. December 2023. [391260].
15. Brar SK, Perveen S, Chaudhry MR, et al. Erythropoietin-Induced Hypertension: A Review of Pathogenesis, Treatment, and Role of Blood Viscosity. Cureus. 2021 Jan 20;13(1):e12804.
16. Versmissen J, Mirabito Colafella KM, Koolen SLW, Danser AHJ. Vascular Cardio-Oncology: Vascular Endothelial Growth Factor inhibitors and hypertension. Cardiovasc Res. 2019 Apr 15;115(5):904-914.
17. Lyon AR, López-Fernández T, Couch LS, et al. 2022 ESC Guidelines on cardio-oncology developed in collaboration with the European Hematology Association (EHA), the European Society for Therapeutic Radiology and Oncology (ESTRO) and the International Cardio-Oncology Society (IC-OS). Eur Heart J. 2022 Nov 1;43(41):4229-4361.
18. Clinical Resource, Common Oral Medications That May Need Tapering. Pharmacist's Letter/Pharmacy Technician's Letter/Prescriber Insights. December 2024. [401270].
19. Medrea I, Cooper P, Langman M, et al. Updated Canadian Headache Society Migraine Prevention Guideline with Systematic Review and Meta-analysis. Can J Neurol Sci. 2024 Nov 7:1-23.