

# Influence of OTC and Herbal Products on the CV System



AMERICAN COLLEGE of CARDIOLOGY

Advancing Heart Care Worldwide

## PROBLEM



Patients are increasingly using over-the-counter (OTC) supplements and herbal products for both preventative and therapeutic purposes.



Many OTC products can potentially have serious consequences via direct effects on the cardiovascular (CV) system and/or hemodynamic integrity.

## SOLUTION



Avoid certain OTC supplements or herbal products in patients with CV disease as outlined in Table 1.

TABLE 1: Products With Effects on the CV System<sup>1-10</sup>

	Supplement or Herbal Product	Rationale	Monitoring Parameter/ Recommendation
	Capsicum, Ginseng, Licorice, Ma-huang (ephedra), Yohimbine	Hypertension	Blood pressure
	Black cohosh, Ginseng, Gynura, Hawthorn, Irish moss (carrageenan), Kelp, Tetrandrine	Hypotension	Blood pressure
	Guarana, Ma-huang (ephedra), Yohimbine	Tachycardia	Heart rate
	Licorice	Fluid retention	Weight and signs of edema

	Supplement or Herbal Product	Rationale	Monitoring Parameter/ Recommendation
	Lily of the Valley	Bradycardia	Heart rate <b>Avoid use in patients on digoxin</b>
	Aconite	Ventricular tachycardia, Bradycardia, Hypotension, Myocardial injury, Myocarditis	<b>Avoid use</b>
	Kratom	Tachycardia, Hypertension, Cardiac arrest	<b>Avoid use</b>
	Alfalfa, Bilberry, Danshen, Dong quai, Fenugreek, Garlic, Ginkgo biloba, Ginseng, Licorice, Motherwort, Saw palmetto	Increased bleeding risk	Bleeding <b>Consider avoidance based on patient-specific bleeding risk</b>
	Oleander	Heart block, Hyperkalemia, Arrhythmias, Death	<b>Avoid use</b>
	Cesium chloride	Arrhythmias, Seizures, Cardiac arrest, Death	<b>Avoid use</b>
	Aloe vera, Bitter orange, Cesium chloride, Echinacea, Ginkgo biloba, Ginseng, Guarana, Hawthorn, Horny goat weed, Ibogaine, Licorice, Lily of the valley, Night-blooming cereus, Oleander, Rhodiola, St. John's wort	Increased QT interval	Electrocardiogram <b>Avoid use in patients with a prolonged QTc and/or congenital QT syndrome</b>

## PREVENT POTENTIAL ERRORS



Educate patients and providers about the potential adverse effects of OTC and herbal products.



Closely monitor patients with CV disease for harmful effects or toxicities from OTC products.



Perform accurate patient medication histories to ensure all OTC products are known; encourage patients to report all OTC and herbal products.

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