hawthorne (Crataegus Species) (haw-thorn)

Other Names(s):

cecropia, red haw, hogthorn, maybush, silktown

Classification

Therapeutic: antihypertensive, inotropic

Common Uses


Action

Active components in hawthorne include flavonoids and procyanidins. Increase coronary blood flow. Positive inotropic and chronotropic effects because of increased permeability to calcium and inhibition of phosphodiesterase. Therapeutic Effects:

Increased cardiac output. Decreased BP, myocardial workload, and oxygen consumption.

Pharmacokinetics

Absorption: Unknown.
Distribution: Unknown.
Metabolism and Excretion: Unknown.
Half-life: Unknown.

TIME/ACTION PROFILE

ROUTE ONSET PEAK DURATION
PO unknown 6-8 wk unknown

Contraindications/Precautions

Contraindicated in: Pregnancy (potential uterine activity); Lactation.
Use Cautiously in: Concurrent use with ACE inhibitors and digoxin; Do not discontinue use abruptly.

Adverse Reactions/Side Effects

CNS: agitation, dizziness, fatigue, vertigo, headache, sedation (high dose), sleeplessness, sweating.
CV: hypotension (high dose), palpitations.
Derm: rash.
GI: nausea.

Interactions

Natural Product-Drug: May potentiate effects of digoxin, calcium channel blockers, and beta blockers. Concurrent use with phosphodiesterase-5 inhibitors (sildenafil, tadalafil, vardenafil) and nitrates may potentiate vasodilatory effects. May cause additive CNS depressant effects used with other CNS depressants.

Natural-Natural Products: Additive effect with other cardiac glycosides: con- taining herbs (digitoxin, black hellebore, oleander leaf, and others). Additive hypotensive effects with herbs than lower BP such as ginger, panax ginseng, coenzyme Q-10, valerian. Additive effects with other cardiac herbs (devil's claw, havea, and others).

Route/Commonly Used Doses

PO (Adults): Heart failure—160–1800 mg standardized hawthorne leaf with flower extract in 2–3 divided doses daily. Hawthorne fluid extract (1:1 in 25% alcohol)—0.5–1 mL tid; hawthorne fruit tincture (1:5 in 45% alcohol)—1–2 mL tid; dried hawthorne berries—500–1000 mg tid.

NURSING IMPLICATIONS

Assessment

Monitor intake and output ratios and daily weight. Assess for peripheral edema, auscultate lungs for rales and crackles during therapy.

Assess BP and pulse periodically during therapy.

Potential Nursing Diagnoses

Decreased cardiac output (Indications)

Deficient knowledge, related to medication regimen (Patient/Family Teaching)

Implementation

Administered in 2–3 divided doses daily at the same time.

May be taken without regard to food.

Patient/Family Teaching

Advise patients that there are other proven therapies available for treatment of heart failure. These therapies should be employed prior to initiating treatment with hawthorne.

Tell patients to take hawthorne without the advice of health care professional.

Instruct patients in the symptoms of a heart attack (pain in the region of the heart, jaw, arm, or upper abdomen; sweating; chest tightness) and heart failure (shortness of breath, swelling, fatigue).

Contraindications

Discontinued.
ness of breath, chest tightness, dizziness, sweating) and to promptly contact health care professional if they occur.

- Advise patient to report weight gain or persistent swelling of the feet to health care professional.
- May cause dizziness and fatigue. Patients should avoid driving or other activities that require mental alertness until response to herb is known.
- Avoid alcohol and other CNS depressants while taking hawthorne without consulting health care professional.
- Profuse sweating and dehydration under extreme heat may increase the BP-lowering properties of hawthorne, leading to severe hypotension. Warn patients to avoid exertion in hot weather to minimize the risk of side effects.
- Instruct patients that hawthorne helps control the symptoms of heart failure but does not cure the disease. Lifestyle changes (salt restriction, weight management, exercise as tolerated, adherence to medication regimen) still need to be followed.
- Instruct patients to consult health care professional before taking Rx, OTC, or other herbal products concurrently with hawthorne.
- Advise female patients to use contraception during therapy and to notify health care professional if pregnancy is planned or suspected or if breastfeeding.

**Evaluation**

- Decrease in symptoms of HF. Effects may not be seen for 6 wks.
- Improved cardiac output as evidenced by improved activity tolerance.

**Why was this drug prescribed for your patient?**