Echinacea (Echinacea Purpurea) (ék-in-nay-sha)

Other Names(s):
American coneflower, black sampson, black susan, brauneria angustifolia, kansas snakeroot, purple coneflower, red sunflower, sampson root, scurvy root

Classification
Therapeutic: immune-stimulants

Common Uses

Action
Medicinal parts derived from the roots, leaves, or whole plant of perennial herb (Echinacea). Echinacea purpurea herba has been reported to promote wound healing, which may be due to an increase in white blood cells, spleen cells, and increased activity of granulocytes, as well as an increase in helper T cells and cytokines. E. purpurea radix has been shown to have antibacterial, antiviral, anti-inflammatory, and immune-modulating effects. Therapeutic Effects: Resolution of respiratory and urinary tract infections. Decreased duration and intensity of common cold. Improved wound healing. Stimulates phagocytosis; inhibits action of hyaluronidase (secreted by bacteria), which helps bacteria gain access to healthy cells. Externally, has antifungal and bacteriostatic properties.

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

Adverse Reactions/Side Effects
CNS: Dizziness, fatigue, headache, somnolence.
EENT: Tingling sensation on tongue, sore throat.
GI: Nausea, vomiting, heartburn, constipation, abdominal pain, diarrhea.
Derm: Allergic reaction, rash (more common in children).
Misc: Fever.

Interactions
Natural Product-Drug: May possibly interfere with immunosuppressants because of its immunostimulant activity. May ↑ risk for hepatotoxicity from anabolic steroids, methotrexate, or ketoconazole when taken with echinacea. May ↓ midazolam availability.
Natural-Natural Products: May ↑ risk for hepatotoxicity when taken with kava-kava.

Route/Commonly Used Doses
PO (Adults): Tablets—6.78 mg tablets, take 2 tabs 3 times daily. Capsules—500–1000 mg 3 times a day for 3–7 days. Fluid extract—1–2 ml, solid form (6.5:1)—150–300 mg tid. Should not be used for more than 8 wk at a time. Tea—1/2 tsp comminuted drug, steeped and strained after 10 min, 1 cup 5–6 times daily on the first day, titrating down to 1 cup daily over the next 5 days. Echinacea purpurea herb juice—6–9 mL/day. Liquid—20 drops every 2 hr for the first day of symptoms, then 3 times daily for up to 10 days. Topical (Adults): Ointment, salve, tincture used externally — 1–5–7.5 ml tincture, 2–5 gram root.

TIME/ACTION PROFILE
ROUTE ONSET PEAK DURATION
PO unknown unknown unknown

Contraindications/Precautions
Contraindicated in: Multiple sclerosis, leukosis, collagenoses, AIDS, tuberculosis, auto-immune diseases; Hypersensitivity and cross-sensitivity in patients allergic to plants in Asteraceae/Compositae plant family (daisies, chrysanthemums, marigolds, etc.); DB: Pregnancy and lactation.
Use Cautiously in: Diabetes; Pedi: May increase risk of rash in children; Tinctures should be used cautiously in alcoholics or patients with liver disease; Do not take longer than 8 wk—may suppress immune function.

Other Information
TIME/ACTION PROFILE
ROUTE ONSET PEAK DURATION
PO unknown unknown unknown

Discontinued.
NURSING IMPLICATIONS

Assessment
- Assess wound size, appearance, and drainage prior to the start of and periodically during therapy.
- Assess frequency of common mild illnesses (such as a cold) in response to use.

Potential Nursing Diagnoses
Impaired skin integrity (Indications)

Implementation
- Tinctures may contain significant concentrations of alcohol and may not be suitable for children, alcoholics, patients with liver disease, or those taking disulfiram, metronidazole, or sulfonamide oral antidiabetic agents.
- Prolonged use of this agent may cause overstimulation of the immune system, and use beyond 8 wk is not recommended. Therapy of 10–14 days is usually considered sufficient.
- May be taken without regard to food.

Patient/Family Teaching
- Herb is more effective for treatment than prevention of colds. Take at first sign of symptoms.
- Advise patient to seek immediate treatment for an illness that does not improve after taking this herb.
- Instruct patient that the usual course of therapy is 10–14 days and 8 wk is the maximum.
- Inform patient that use of this herb is not recommended in severe illnesses (e.g., HIV, tuberculosis) or autoimmune diseases (e.g., multiple sclerosis, collagen diseases, etc.).
- Caution patient that prolonged use of this herb may result in overstimulation of the immune system, possibly with subsequent immunosuppression.
- Warn pregnant or breast-feeding women not to use this herb.
- Instruct patient to consult health care professional before taking any prescription or OTC medications concurrently with echinacea.

Evaluation
- Improved wound healing.
- Infrequent common illnesses.
- Illnesses of shorter duration and less severity.

Why was this drug prescribed for your patient?