garlic (gar-lik)

Other Names: Alli sativa bulbus, Allium sativum

Classification
Therapeutic: lipid-lowering agents

Common Uses
PO: Hypertension, hyperlipidemia, cardiovascular disease prevention, colorectal and gastric cancer prevention.
Topical: Dermal fungal infections including tinea corporis, cruris, and pedis.

Action
Acts like HDL. garlic stimulates properties in lowering cholesterol, but less effectively than statin drugs. Decreased platelet aggregation.

Therapeutic Effects:
Decreased cholesterol levels. Decreased platelet aggregation.

Pharmacokinetics
Absorption: garlic oil is well absorbed.

Distribution: Unknown.

Metabolism and Excretion: Kidney and lungs.

Half-life: Unknown.

TIME/ACTION PROFILE
ROUTE ONSET PEAK DURATION
PO 4–25 wk unknown unknown

Contraindications/Precautions
Contraindicated in:
Bleeding disorders. Discontinue use 1-2 weeks prior to surgery.

Use Cautiously in:
Diabetes, gastrointestinal infection or inflammation.

Adverse Reactions/Side Effects
CNS:
dizziness.

GI:
Irritation of the mouth, esophagus, and stomach, nausea, bad breath, vomiting, diarrhea, diarrhea. Symptoms of dermatitis and other allergic reactions (urticaria, rash, anaphylaxis [rare]).

Derm: Contact dermatitis and other allergic reactions (asthma, rash, anaphylaxis [rare]).

Diabetes: Chronic use or excessive dose may lead to hyperglycemia.

Hemat: Chronic use or excessive dose may lead to hemolytic anemia and loss of RBCs, platelet dysfunction, prolonged bleeding time. May cause body odor.

Interactions
Natural Product-Drug:
Use of garlic with anticoagulants, antplatelet agents, and thrombolytics may increase risk of bleeding. May decrease effectiveness of contraceptive drugs and cyclosporine. May increase plasma concentration of saquinavir, nevirapine, delavirdine, and efavirenz.

Natural-Natural Products:
Beets with anticoagulant or antplatelet properties may increase bleeding risk when combined with garlic, including anglicula, anise, asafoetida, bugbane, boldo, capers, celery, chamomile, clove, dandelion, dong quai, fenugreek, feverfew, ginger, ginseng, horseradish, horehound, meadowsweet, prickly ash, onion, papain, passionflower, poplar, quassia, red clover, turmeric, wild carrot, wild lettuce, willow, and others.

Route/Modalities Used Doses
PO (Adults): 200–400 mg tid of standardized garlic powder extract with 1.3% allin.

Fresh garlic—1–7 cloves per day. One clove contains approximately 4 grams of garlic.
Topical (Adults): 0.4% cream, 0.6% gel, or 1% gel applied bid x 7 days.

NURSING IMPLICATIONS
Assessment

Elicit from patients their usual dietary intake especially in regard to fat consumption.

Assess patient’s reason for using this herbal remedy and knowledge about hyperlipidemia.

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

Implementation

Take orally as fresh clove, capsule or tablet.

Do not exceed recommended dose.

Continued

= Discontinued
Instruct patients about the need to follow a healthy diet (low in fat and high in vegetables and fruits) in conjunction with garlic. Other lipid-reducing strategies, such as exercise and smoking cessation, should also be employed.

Inform patients that there are other more effective agents for lipid reduction available.

Emphasize the need for follow-up exams with a healthcare professional to assess effectiveness of the regimen.

Warn patients about the potential for bleeding and not to take this herbal remedy without notifying their healthcare provider if they are on other medications. Instruct patients undergoing elective surgery to stop using garlic 2 weeks prior to surgery and to notify the surgeons that they are taking garlic in the event of emergent surgery.

Notify patients that allergies may occur and to discontinue use if symptoms develop.

**Evaluation**
- Normalization of lipid profile.
- Prevention of cardiac disease.

Why was this drug prescribed for your patient?