varenicline (ver-en-i-cline)

- Therapeutic: Cholinergic

Classification: smoking deterrents

Pharmacologic: nicotine agonists

Pregnancy Category C

Indications
Treatment of smoking cessation, in conjunction with nonpharmacologic support (educational materials/counseling).

Action
Selectively binds to alpha4, beta2 nicotinic acetylcholine receptors, acting as a nicotine agonist; prevents the binding of nicotine to receptors.

Therapeutic Effects:
Decreased desire to smoke.

Pharmacokinetics
Absorption: 100% absorbed following oral administration.

Distribution: Minimally metabolized; 92% excreted in urine unchanged.

Half-life: 24 hr.

TIME/ACTION PROFILE
ROUTE ONSET PEAK DURATION
PO unknown 3–4 hr 24 hr

Contraindications/Precautions
Contraindicated in: Hypersensitivity; Lactation: Lactation; Pedi: Safety not established.

Use Cautiously in: Severe renal impairment (dose recommended if CCr ≤30 mL/min); Stable cardiovascular disease (may q risk of cardiovascular events); Psychiatric illness; Geri: Consider age-related changes in renal function; OB: Use only if maternal benefit outweighs fetal risk.

Adverse Reactions/Side Effects
CNS: STROKE, SUICIDAL THOUGHTS/BEHAVIOR, attention span, anxiety, depression, insomnia, irritability, dizziness, drowsiness, agitation, delirium, delusion, hostility, impaired concentration, memory, migraine, psychosis, somnolence, syncope.

CV: atrial fibrillation, dysrhythmia, hypertension.

EENT: blurred vision, visual disturbances.

GI: diarrhea, gingivitis, nausea, appetite, constipation, dyspepsia, dysphagia, enterocolitis, vomiting, abdominal cramps, vomiting.

Derm: STEVENS-JOHNSON SYNDROME, flushing, hyperhydrosis, acne, dermatitis, dry skin.

Hemat: anemia.

MS: arthralgia, back pain, musculoskeletal pain, muscle cramps, myalgia, restless legs.

Misc: ANGIOEDEMA, accidental injury, chills, fever, hypersensitivity, mild physical dependence.

Interactions
Drug-Drug: Smoking cessation may q metabolism of theophylline, warfarin, and insulin resulting in q effects; careful monitoring is recommended. Risk of adverse reactions (nausea, vomiting, dizziness, fatigue, headache) may be q with nicotine replacement therapy (nicotine transdermal patches).

Route/Dosage
PO (Adults):
○ Treatment is started one week prior to planned smoking cessation (may also begin dosing and then quit smoking between days 8 and 35 of treatment); 0.5 mg once daily on the first three days, then 0.5 mg twice daily for the next 4 days, then 1 mg twice daily.

Renal Impairment
PO (Adults): CCr ≤30 mL/min—0.5 mg daily, may q to 0.5 mg twice daily.

NURSING IMPLICATIONS
Assessment
● Assess for desire to stop smoking.
● Assess for nausea. Usually dose-dependent. May require dose reduction.
● Assess mental status and mood changes, especially during initial few months of therapy and during dose changes. Risk may be increased in children, adolescents, and adults ≥18 yr. Informs health care professional if patient demonstrates significant increase in signs of depression (depressed mood, loss of interest in sexual activities, significant change in weight and/or appetite, insomnia or hypersomnia, psychomotor agitation or retardation, increased fatigue, feelings of guilt or worthless-
ness, slowed thinking or impaired concentration, suicide attempt or suicidal ideation). Restrict amount of drug available to patient.

- Assess for rash periodically during therapy. May cause Stevens-Johnson syndrome. Discontinue therapy if severe or if accompanied with fever, general malaise, fatigue, muscle or joint aches, blisters, oral lesions, conjunctivitis, hepatitis and/or eosinophilia.

- Lab Test Considerations: May cause anemia.

**Potentially Nursing Diagnoses**

Ineffective coping (Impediments)

**Implementation**

- **PO:** Administer after eating with a full glass of water.

**Patient/Family Teaching**

- Instruct patient to take varenicline as directed. Set a date to stop smoking. Start taking varenicline 1 wk before quit date. Begin with 1 mg/day for the first 3 days, then for the next 4 days take one 1.5 mg tablet in the morning and at the evening. After first 7 days, increase to 1 mg tablet in the morning and evening. Advise patient to avoid mild to moderate alcohol before starting therapy.

- Encourage patient to attempt to quit, even if they had early lapses after quit day.

- Advise patient to stop taking varenicline and contact health care professional promptly if agitation, depressed mood, any changes in behavior that are not typical of nicotine withdrawal, or if suicidal thoughts or behavior, rash with mucosal lesions or skin reaction, or chest pain, pressure, or dyspnea occur.

- Provide patient with educational materials and counseling to support attempts to quit smoking.

- Caution patient not to share varenicline with others. May be harmful.

- May cause blurred vision, dizziness, and disturbance in attention. Caution patient to avoid driving and other activities requiring alertness until response to medication is known.

- Advise patient to avoid drinking alcohol or other depressants that may occur and are unsafe. Teach patient to report all health care professional if these symptoms are persistent and bothersome; dose reduction may be considered.

- Instruct patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and consult health care professional before taking any new medications. Instruct patient that some medications may require dose adjustments after quitting smoking.

- Advise patient to notify health care professional if pregnancy is planned or suspected or if breast feeding.

**Evaluation/Desired Outcomes**

- Smoking cessation. Patients who have successfully stopped smoking at the end of 12 wk, should take an additional 12 wk course to increase the likelihood of long-term abstinence. Patients who do not succeed in stopping smoking during 12 wk of initial therapy or who relapse after treatment, should be encouraged to make another attempt once factors contributing to the failed attempt have been identified and addressed.

- Why was this drug prescribed for your patient?