ALMOTRIPTAN

THERAPEUTICS

Brands
- Axert, Almogram

Generic?
No

Class
- Triptan

Commonly Prescribed For
(FDA approved in bold)
- Migraine

How the Drug Works
- Selective 5-HT1 receptor agonist, working predominantly at the B, D, and F receptor subtypes. Effectiveness may be due to blocking the transmission of pain signals from the trigeminal nerve to the trigeminal nucleus caudalis and preventing release of inflammatory neuropeptides rather than just causing vasoconstriction

How Long until It Works
- 1 hour or less

If It Works
- Continue to take as needed. Patients taking acute treatment more than 2 days/week are at risk for medication overuse headache, especially if they have migraine

If It Doesn’t Work
- Treat early in the attack: triptans are less likely to work after the development of cutaneous allodynia, a marker of central sensitization
- For patients with partial response or reoccurrence, add an NSAID
- Change to another agent

Best Augmenting Combos for Partial Response or Treatment Resistance
- NSAIDs or neuroleptics are often used to augment response

Tests
- None required

ADVERSE EFFECTS (AEs)

How Drug Causes AEs
- Direct effect on serotonin receptors

Notable AEs
- Tingling, flushing, sensation of burning, vertigo, sensation of pressure, heaviness, nausea

Life-Threatening or Dangerous AEs
- Rare cardiac events including acute MI, cardiac arrhythmia, and coronary artery vasospasm have been reported

Weight Gain
- Unusual

Sedation
- Unusual

What to Do about AEs
- In most cases, only reassurance is needed. Lower dose, change to another triptan, or use an alternative headache treatment

Best Augmenting Agents for AEs
- Treatment of nausea with antiemetics is acceptable. Other AEs improve with time

DOSING AND USE

Usual Dosage Range
- 6.25–12.5 mg

Dosage Forms
- Tablets: 6.25 and 12.5 mg

How to Dose
- Tablets: Most patients respond best at 12.5 mg oral dose. Give 1 pill at the onset of an attack and repeat in 2 hours for a partial response or if headache returns. Maximum 25 mg/day. Limit 10 days per month

Dosing Tips
- Treat early in attack
Overdose
- May cause hypertension, cardiovascular symptoms. Other possible symptoms include seizure, tremor, extremity erythema, cyanosis or ataxia. For patients with angina, perform ECG and monitor for ischemia for at least 20 hours

Long-Term Use
- Monitor for cardiac risk factors with continued use

Habit Forming
- No

How to Stop
- No need to taper. Patients who overuse triptans often experience withdrawal headaches lasting up to several days

Pharmacokinetics
- Half-life about 3 hours. \( T_{\text{max}} \) 2.5 hours. Bioavailability is 80%. Metabolized by MAO-A enzyme as well as cytochrome P450 (CYP3A4 and CYP2D6) isozymes. 35% protein binding

Drug Interactions
- MAO inhibitors may make it difficult for drug to be metabolized
- Theoretical interactions with SSRI/SNRI. It is unclear whether triptans pose any risk for the development of serotonin syndrome in clinical practice
- Minimal increase in concentration with CYP3A4 inhibitors - no need for dose adjustment

Do Not Use
- Within 2 weeks of MAO inhibitors, or 24 hours of ergot-containing medications such as dihydroergotamine
- Patients with proven hypersensitivity to eletriptan, known cardiovascular disease, uncontrolled hypertension, or Prinzmetal’s angina
- Almotriptan was not studied in patients with hemiplegic and basilar migraine
- May worsen symptoms in ischemic bowel disease

Hepatic Impairment
- Drug metabolism may be decreased. Do not use with severe hepatic impairment

Cardiac Impairment
- Do not use in patients with known cardiovascular or peripheral vascular disease

Elderly
- May be at increased cardiovascular risk

Children and Adolescents
- Safety and efficacy have not been established
- Triptan trials in children were negative, due to higher placebo response

Pregnancy
- Category C: Use only if potential benefit outweighs risk to the fetus. Migraine often improves in pregnancy, and other acute agents (opioids, neuroleptics, prednisone) have more proven safety

Breast-Feeding
- Almotriptan is found in breast milk. Use with caution

THE ART OF PAIN PHARMACOLOGY

Potential Advantages
- Effective with good consistency and excellent tolerability, even compared to other oral triptans. Less risk of abuse than opioids or barbiturate-containing treatments

Potential Disadvantages
- Cost, and the potential for medication overuse headache. May not be as effective as other triptans

Primary Target Symptoms
- Headache pain, nausea, photo- and phonophobia

Pearls
- Early treatment of migraine is most effective
- Lower AEs compared to other triptans. Good consistency and pain-free response, making it a good choice for patients with anxiety who are prone to medication side effects
May not be effective when taken during the aura, or before headache begins.

In patients with “status migrainosus” (migraine lasting more than 72 hours) neuroleptics and dihydroergotamine are more effective.

Triptans were not originally studied for use in the treatment of basilar or hemiplegic migraine.

Patients taking triptans more than 10 days/month are at increased risk of medication overuse headache which is less responsive to treatment.

Chest and throat tightness are usually benign and may be related to esophageal spasm rather than cardiac ischemia. These symptoms occur more commonly in patients without cardiac risk factors.

**Suggested Reading**


