RIZATRIPTAN

**Therapeutics**

**Brands**
- Maxalt

**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 and D 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, dizziness, sensation of pressure, palpitations, heaviness, nausea

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

**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**
- 5–10 mg, maximum 20 mg/day

**Dosage Forms**
- Tablets: 5 and 10 mg
- Orally disintegrating tablets: 5 and 10 mg

**How to Dose**
- Tablets: Most patients respond best at 10 mg oral dose. Give 1 pill at the onset of an attack and repeat in 2 hours for a partial response or the headache returns. Maximum 30 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 12 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 2 hours. Tmax 1–2.5 hours, longer with orally disintegrating tablets. Bioavailability is 40%. Metabolism mostly by MAO A isoenzyme. 14% protein binding

Drug Interactions

• MAO inhibitors may make it difficult for drug to be metabolized. Theoretical interactions with SSRI/SNRI. It is unclear that triptans pose any risk for the development of serotonin syndrome in clinical practice
• Concurrent propranolol use increases peak concentrations – use the 5 mg dose
• Use with sibutramine, a weight loss drug, can cause a serotonin syndrome including weakness, irritability, myoclonus and confusion

Other Warnings/Precautions

• For phenylketonurics: Tablets contain phenylalanine

Do Not Use

• Within 2 weeks of MAO inhibitors, or 24 hours of ergot-containing medications such as dihydroergotamine

• Patients with proven hypersensitivity to sumatriptan, known cardiovascular disease, uncontrolled hypertension, or Prinzmetal’s angina
• Rizatriptan was not studied in patients with hemiplegic and basilar migraine
• May worsen symptoms in ischemic bowel disease

SPECIAL POPULATIONS

Renal Impairment

• Concentration increases in those with severe renal impairment (creatinine clearance less than 2 mL/min). May be at increased cardiovascular risk

Hepatic Impairment

• Drug metabolism decreased with hepatic disease. 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. Pregnancy registry studies ongoing. Migraine often improves in pregnancy, and other acute agents (opioids, neuroleptics, prednisone) have more proven safety

Breast Feeding

• Rizatriptan is found in breast milk. Use with caution
RIZATRIPTAN (continued)

THE ART OF NEUROPHARMACOLOGY

Potential Advantages
• Effective and fast acting, even compared to other oral triptans. May be drug of choice for patients with relatively short-lasting migraines. AE similar to other triptans. Less risk of abuse than opioids or barbiturate-containing treatments. Available as melt formulation.

Potential Disadvantages
• Cost, potential for medication-overuse headache. Relatively short half-life, even compared to other triptans.

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

Pearls
• Early treatment of migraine is most effective.
• Compared to other triptans, it has the highest 2-hour pain-free response.
• May not be effective when taken during aura, before headache begins.
• In patients with “status migrainosus” (migraine lasting more than 72 hours), neuroleptics and DHE 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

