



## Antihistamines & Leukotriene Inhibitors

### Introduction

Antihistamines are designed to oppose the effects of histamine, the main chemical released by the body in allergic reactions. Some chronic sinusitis sufferers have allergies, which may contribute to swelling in the nose and sinuses. Antihistamines do not truly alter your allergic susceptibility but can lessen the uncomfortable symptoms of an allergic reaction.

### Dosing

Antihistamines are most effective when taken before an anticipated allergic reaction (such as before visiting a friend with a cat if you have a cat allergy, or before mowing the lawn if you are allergic to grass). If taken after an allergic reaction is already in progress, the helpful effects may be delayed. Therefore, in patients with multiple allergies, the medication is typically taken on a regular basis.

### Adverse effects

Most antihistamines have a sedating effect, and the drowsiness they produce is usually the most undesired side-effect. The more recently developed non-sedating antihistamines such as fexofenadine /*Allegra*®, loratadine/*Claritin*®, and desloratadine/*Clarinex*® are exceptions to this rule; there is usually less sedation and dryness. Cetirizine/*Zyrtec*® may cause drowsiness and should be taken at bedtime. These should not be taken if you have abnormal liver function or hypokalemia (low potassium).

Common side-effects of antihistamines includes dry mouth, blurry vision, and difficulty urinating. You should inform your doctor if you have glaucoma, prostate trouble, kidney or liver disease. Because of possible drug interactions, inform your physician if you take sedatives, monoamine oxidase inhibitors (MAOI's - a type of anti-depressant medication) or consume large amounts of alcoholic beverages.

### Topical Antihistamine Spray:

Topical nasal antihistamine spray such as *Astelin*® may be prescribed. It is an antihistamine that does not get absorbed significantly into the bloodstream but stays locally in the nose. It can be used with patients that are unable to tolerate or take oral antihistamines. It does have a bitter taste.

### Leukotriene Inhibitors

**Introduction:** Leukotriene inhibitors are used to control chronic asthma. Leukotrienes play a role in the inflammatory process with asthma exacerbations. These drugs block the activation of leukotriene by interfering with different stages of its synthesis pathway. Zileuton/*Zyflo*® blocks one part of the pathway while zafirlukast/*Accolate*® and Singulair® work in a different area. Therefore, *Zyflo*® may be prescribed together with either *Accolate*® or Singulair®.

**Dosing:** Singulair is taken once daily, while *Accolate*® is taken 4 times a day, 1 hour before or 2



### **Antihistamines & Leukotriene Inhibitors (cont.)**

hours after meals. Zflo® is also 4 times a day, without regard to meals. Both need to be taken every day, not just with acute attacks.

**Adverse reactions:** Zflo® can elevate liver enzymes. Liver function tests should be monitored while on therapy. Zflo® can increase the effects of theophylline. If you are taking theophylline, this level should also be monitored. It can also increase the effects of other medications such as Coumadin and beta-blockers. Accolate® and Singulair® can potentate drugs metabolized by certain isoenzymes (including coumadin, Dilantin®, calcium channel blockers, and cyclosporine). Erythromycins, Biaxin®, or theophylline may antagonize them.