



Natural Therapies & Prescriptions That Enhance Life.™

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*Compounding Location

Compounding for Otolaryngology

Antifungal Nasal Spray for Allergic Fungal Sinusitis

Allergic fungal sinusitis (AFS) is a form of chronic sinusitis characterized by nasal obstruction, sinus pain, rhinorrhea, and frequent orbital symptoms. Systemic antifungal drugs have not been effective for treatment of AFS, primarily because the drugs are not present in nasal secretions. Conventional treatment consists of sinus surgery with extirpation of the allergic mucus, followed by postoperative ventilation of the sinuses and the use of systemic steroids. Frequent saline nasal irrigation has been used to clear the nasal and sinus cavity. Despite all of these interventions, AFS has a high rate of recurrence. At the Department of Otolaryngology, Head and Neck Surgery, New York Presbyterian Hospital of Columbia and Cornell University, a prospective pilot study investigated the use of topical antifungal nasal spray in addition to systemic steroids and oral itraconazole in the treatment of AFS. Sixteen patients with a history of allergic fungal sinusitis were given fluconazole nasal spray and followed for 3 months. Stabilization or improvement of disease and a decrease in mucosal edema, without significant side effects, was observed in 12 of the 16 patients.

Ear Nose Throat J 2004 Oct;83(10):692, 694-5

A prospective open-label pilot study at the Department of Surgery-Otolaryngology, University of Adelaide, Woodville, Australia examined the efficacy and tolerability of topical mupirocin for the management of surgically recalcitrant chronic rhinosinusitis (CRS) associated with *Staphylococcus aureus* infection. Patients were treated twice daily for 3 weeks with nasal lavages containing 0.05% mupirocin in lactated ringers solution. Fifteen of 16 patients had improved nasendoscopic findings and negative swab results for *Staphylococcus aureus* after treatment. The therapy was well tolerated and may represent an effective and well tolerated alternative treatment for postsurgical recalcitrant CRS.

Laryngoscope. 2008 Sep;118(9):1677-80.

The Cleveland Clinic Foundation, Head and Neck Institute, reports that mupirocin nasal irrigations may avoid the need for intravenous antibiotics, which often provide temporary benefits and entail greater cost and morbidity. Thus, mupirocin nasal irrigations may provide a relatively simple means for the management of MRSA exacerbations of CRS.

Am J Otolaryngol. 2006 May-Jun;27(3):161-5.

Xylitol inhibits the growth of *Streptococcus pneumoniae* and it inhibits the attachment of both pneumococci and *Haemophilus influenzae* to the nasopharyngeal cells.

Vaccine. 2000 Dec; 8(19) Suppl 1:S144-7.

Broad spectrum nasal sprays can be compounded for use following sinus surgery.

Sample Prescription

Compounded Medication

*Itraconazole 0.2%, Mupirocin 0.2%, Triamcinolone 0.03%
In Xylitol Nasal Spray*

Disp: 100 ml.

Sig: 1-2 sprays in each nostril 3 times daily for 14 days

Relieving Ear Pain

Auralgan™ is a brand name for an ear drop that was originally marketed to treat acute otitis externa and contained the pain reliever/anti-inflammatory antipyrine and the local anesthetic benzocaine. Years ago, a generic version became available and the manufacturer stopped making the brand name product. The generic version has been used for years, but recently, the drug company decided to reformulate and reintroduce the brand name product, adding acetic acid for its antibacterial and antifungal properties, and substituting U-polycosanol 410 for alcohol. The cost for the new Auralgan™ formulation is almost 100 times the cost of the generic, which can no longer be substituted, because the formulation has been changed. Since there is no proof that the reformulated Auralgan™ offers any benefit over the much less expensive generic formulation and Auralgan™ is not FDA-approved, we suggest that antipyrine/benzocaine otic preparations be considered when a topical analgesic is needed to relieve ear pain. To help control health care costs, practitioners can write prescriptions for “antipyrine/benzocaine otic solution” instead of Auralgan™.

Sample Prescription

Compounded Medication

“Antipyrine/Benzocaine Otic Solution”

Antipyrine 5.4%, Benzocaine 1.4%

Dispense: 15 ml.

Sig: Place 1-4 drops in effected ear 3 to 4 times per day.

Antifungal Therapy for Oral Candidiasis

Children and immuno-suppressed patients often develop fungal infections of the oral mucosa. Although Amphotericin B oral suspension can be prescribed to “swish and swallow”, these directions are often difficult for children to follow, and patients who have mucositis may not be able to swallow. The professionals at Clear Spring Pharmacy can compound troches, or lozenges, that are easy to hold in the mouth when prolonged contact between the medication and the oral mucosa is desired.

Sample Prescription

Compounded Medication

Amphotericin B 100 mg gelatin troches

Dispense #40 troches

Sig: Allow one troche to dissolve in mouth four times per day.

Cough Suppressant

Codeine sulfate is a centrally acting antitussive that also appears to exert a drying effect on the respiratory tract mucosa and increases the viscosity of bronchial secretions.

International Journal of Pharmaceutical Compounding. 2004 Nov-Dec; 8(6): 462-465

Sample Prescription

Compounded Medication

Codeine 15mg/5ml oral solution

Dispense: 50 ml. (flavored according to patient preference)

Sig: 1/2 - 1 tsp every 6 to 8 hrs as needed for cough

Please contact Clear Spring Pharmacy if you would like us to make a custom RX pad for convenient prescribing of any compounded preparation.