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What You Need To Know - Medications for Phinitis Uses and Abuses

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Giving medications is only one of several options in the management of rhinitis. Be deciding on the most appropriate medication to prescribe, you will first have determine the cause of rhinitis: allergic, non-allergic, infectious, occupatio hormonal or drug induced. After that, you decide if there are any non-drug and r surgical methods that may be used to alleviate the symptoms. For example, if a pat is allergic to house dust mite, or cat's dander, he should be encouraged to clean up bedroom environment or to keep the cat out of the bedroom. Besides avoidance environmental control measures, there is also surgery, immunotherapy neutralisation therapy to help in resolving the patient's symptoms.

Symptom focused medical therapy

Whenever a patient complains of a nasal problem, ask for the 3 main symptoms: n obstruction, clear watery rhinorhea and sneezing/itchiness. Other symptoms hyposmia, mouth-breathing, dry throat, snoring, postnasal drip, night cou headaches, poor sleep and epistaxis are important, but they are "byproduct" sympt which normally resolve when the 3 main symptoms are treated. For example, n obstruction can lead to hyposmia, mouth breathing and snoring. With adeq treatment of nasal obstruction, these "byproduct" symptoms usually improve.

Three main groups of nasal medications

1. Oral antihistamines: These act by competitive inhibition of H1 histamine receptors in the nasal mucosa. Blockade of histamine action results in alleviation of nasal obstruction, rhinorhea and sneezing/itchiness. However, antihistamines do not have a similar effect on the three nasal symptoms. They are highly efficacious in relieving rhinorhea, sneezing

and itchiness, but less so with nasal obstruction. Furthermore, antihistamines block the action of histamine, but not the other mediators of allergic inflammation such as bradykinin and prostaglandin. Thus, although symptom relief with antihistamines are significant, steroids offer more in terms of superiority in clinical efficacy.

The second generation non-sedating antihistamines offer many advantages over o drugs from the first generation. They have a longer half-life, and offer once a dosing to improve patient compliance. Unlike older antihistamines, which also ac the cholinergic receptors, new generation antihistamines have greater H1 rece specificity, minimal unwanted anti-cholinergic effects, and a better therape window. Furthermore, oral antihistamines have an advantage over topical steroid being able to treat allergic manifestation other than rhinitis eg. conjunctivitis eczema.

I normally avoid Hismanal, which has an extremely long half life of 2 weeks. Hism also carries with it the risk of weight gain and cardiac arrhythmias. Another generation antihistamine, Teldane, has been withdrawn because of its tendency to b up to high concentrations when given simultaneously with erythromycin ketoconazole, giving rise to risks of cardiac arrhythmias. I would recommend ei Zyrtec, Clarityne, and a new entrant into the market, Kestine.

2. Topical glucocorticoids: The word "steroids" often create fear in patients. Such a fear is understandable as many patients are aware of the multitude of undesirable side-effects that is associated with long term oral steroid therapy. However, topical steroids and short term oral steroid therapy are legitimate options to consider in patients with rhinitis.

Topical steroids such as Flixonase and Rhinocort are the main-stay of long term cor of rhinitis symptoms. In the past, before the safety of topical steroids were establis antihistamines were the drug of choice for initiating therapy for rhinitis patie Presently, with the established safety, efficacy, and superiority of symptom contro demonstrated in numerous clinical trials, topical steroids have become the drug of choice in symptom control. Topical steroids are also safe for children above 6 year age. As long as dosage falls within recommended limits, children can be on top steroids for up to a year without any untoward effects.

Topical steroids have 3 levels of safety:

a. They are given in very low doses. Flixonase delivers 50 eg of active ingredient in each spray. If two sprays are used in each nostril once a day, only 200 eg of steroids would have been given. Compare this with the a 20 mg oral dose of prednisolone.

	Nasal Obstruction	Rhinorhea	Sneezing & Itchiness
Oral antihistamines	+	++	+++
Topical steriods	++	+++	+++
Oral steroids	++	+++	+++
Topical decongestants	+++	-	-
Oral decongestants	++	-	-

b. They have a poor absorption even if they are swallowed.

c. Absorbed medications are quickly metabolised by the liver because of significant first pass effect.

3. Topical and oral decongestants (vasoconstrictors): They act by caus vasoconstriction of the erectile tissues found in the nasal septum and turbina improving nasal airway patency and lowering nasal airway resistance. Top decongestants are very effective in unblocking the nose, working rapidly wi minutes of topical instillation. However, they do little to relieve rhinorhea, sneez and itchiness. Unlike topical steroids, they should not be used for more than 2 we because of the development of rhinitis medicamentosa.

Decongestants are commonly used in combination with antihistamines or top steroids.

This is done for the following reasons:

1. Complementary mode of action on different symptoms: Antihistamines and topical steroids work better with rhinorhea, sneezing and itchiness, but decongestants effectively relieve nasal obstruction.

2. Opposing mode of action on unwanted side-effects: First generation antihistamines cause sedation while oral decongestants produce mental stimulation and alertness.

3. Better distribution of topical medications: Topical steroids are poorly distributed an obstructed nose. Preliminary treatment with a topical decongestant 3 to 5 minutes before administration of topical steroids allows the latter to be more effectively delivered and distributed in the nasal cavity, resulting in better clinical efficacy.

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